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Formal and Informal Educational Activities of Transformational Nurse Leaders in Urban Hospitals

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FORMAL AND INFORMAL EDUCATIONAL ACTIVITIES OF TRANSFORMATIONAL NURSE LEADERS IN URBAN HOSPITALS

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DEDICATION

To the memory of my father,

George Edward Waltrip,

who always believed in me.

ABSTRACT

FORMAL AND INFORMAL EDUCATIONAL ACTIVITIES OF TRANSFORMATIONAL HOSPITAL NURSE LEADERS

Sue Waltrip Young
Old Dominion University, 1991
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Absence of educational programs designed to develop a specific leadership style has prompted educators in nursing administration to consider designing such programs. As the cost of hospital care escalates and the recruitment and retention of individuals into hospital nursing remains problematic, it is essential that methods be developed to address these issues. This study described the educational processes experienced by transformational nurse leaders employed in urban hospitals. By discovering the relative importance and amount of these activities for nurses identified as transformational leaders, data are provided for the design and testing of educational programs created to enhance a transformational leadership style.

Findings from this ex post facto study revealed that transformational hospital nurse leaders had significantly more informal education and perceived that education to be more important than hospital nurse leaders with a lesser degree of transformational leadership. The importance of

informal education as a contributor to leadership development was also explained by the amount of leadership experience and the type of academic nursing program completed by study participants. In addition the nurse leader group with a high degree of transformational leadership reported experiencing significantly higher amounts of formal leadership content and more exposure to a variety of teaching strategies. Methodological triangulation of quantitative and qualitative data resulted in corroboration of findings.

The most important informal educational experience for those nurse leaders with a high degree of transformational leadership was having a mentor. Regardless of degree of transformational leadership, study participants described having participated in learning activities that utilized group discussion to solve immediate work related problems as critical to development of their leadership style. The role of the teacher as a facilitator of discussion through provision of a supportive environment and clearly communicated expertise was also a major factor.

Findings from this study suggest that educational programs using adult learning concepts are more important as a contributor to leadership development for this sample regardless of degree of transformational leadership. As distinct differences in leadership attitude and view of the organizational environment according to degree of transformational leadership were consistently reported on

interview, further investigation of these variables are recommended. Design and testing of an educational program intended to enhance transformational leadership style is also recommended.

ACKNOWLEDGEMENTS

The initiation and completion of this research has been accomplished as the result of guidance, support, and encouragement from many persons. With gratitude I acknowledge all those individuals who have contributed to this effort.

For their counsel and assistance in helping me clarify my ideas, design this study, and thoughtfully analyze the data, I am indebted to my dissertation committee: Drs. Jack Robinson, John Derolf, and Loretta Cornelius. I am especially grateful to Dr. Cornelius for introducing me to the concept of transformational leadership and to Dr. Robinson for assisting me with data organization and interpretation.

Sincere appreciation is expressed to Dr. Brenda Nichols for her hours of support and willingness to serve as a sounding board, critic, and editor. It is also important to acknowledge the innumerable hours of data entry and computer programming contributed by Susan Reynolds.

From the beginning of my doctoral studies the continuous support and encouragement I have received from my colleagues and friends in the School of Nursing has been invaluable. Their faith in my ability to complete this work

and their tolerance of my work behaviors while completing this program provided much needed motivation to not abandon this project.

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Finally, an incalculable debt of gratitude is owed my family. Of particular importance are the hours of loving cooperation, self-reliance, and sacrifice given by my son, Christopher. Though he has not always understood the process of doctoral education, he has been wise beyond his

young years in understanding the help his mother needed.

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CHAPTER I

INTRODUCTION

Currently there is a nursing shortage which is predicted to escalate to 800,000 by 2020.[1] A primary factor contributing to the shortage of hospital nurses is work dissatisfaction. A major factor in job satisfaction and retention of registered nurse is leader behavior.[2] An ineffective staff nurse relationship with the immediate supervisor has been identified as a major contributor to work dissatisfaction.[3]

Urban hospitals by structure are bureaucratic organizations. The work behaviors expected in a bureaucratic organization and the work behaviors professionals expect to use have resulted in organizational

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[1]"RN Population Seen Declining After the Year 2000", American Journal of Nursing 90, no. 9 (1990): 97.

[2]Patricia A. Prescott, "Another Round of Nurse Shortage," Image: Journal of Nursing Scholarship 19, no. 4 (1987): 204-9.

[3]Ada Hinshaw, Carolyn Smeltzer, and Jan Atwood, "Innovative Retention Strategies for Nursing Staff," Journal of Nursing Administration 17, no. 6 (1987): 8-16.

worker dissonance.[4] Current federally mandated economic constraints experienced by urban hospitals have frequently resulted in organizational restructuring with nurse leaders being assigned increasingly autonomous responsibility and authority.[5] This change in job performance expectation has presented an opportunity for the nurse leader to exhibit leadership behavior that matches the expanded job expectations.

Transformational leadership has been described as leadership which focuses on influencing followers to "performance beyond expectations" while simultaneously increasing worker job satisfaction.[6] Excellent organizations as described by Peters and Waterman[7] have a prevalence of executives and managers who are transformational leaders. A national sample of hospital nursing organizations has identified those nursing

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[4]Timothy Porter-O'Grady and Sharon Finnegan, Shared Governance for Nursing: A Creative Approach to Professional Accountability (Rockville, MD: Aspen, 1984), 32; Mary Ann Fralic, "Development of the Head Nurse Role: A Key to Survival in Nursing Service Administration," in The Nursing Profession: A Time to Speak, ed. Norma Chaska (New York: McGraw-Hill, 1983), 659-70.

[5]Linda Hodges, Rebecca Knapp, and Judy Cooper, "Head Nurses: Their Practice and Education," Journal of Nursing Administration 17, no. 12 (1987): 39-44.

[6]Bernard Bass, Leadership and Performance Beyond Expectations (New York: Free Press, 1985), 14-32.

[7]Thomas J. Peters and Robert H. Waterman, In Search of Excellence: Lessons from America's Best-Run Companies (New York: Harper & Row, 1982), 56-86.

organizations meeting the Peters and Waterman criteria for excellence.[8] Increased staff nurse job satisfaction and satisfaction with worker-supervisor relationships were reported as being present in those nursing organizations meeting this criteria for excellence.

According to Zaleznik[9] leaders ". . . use themselves as the instruments of learning and acting," thereby influencing the thoughts and actions of others. Fiedler and Garcia[10] have viewed the leader as an elected or appointed individual ". . . who has emerged from the group to direct and coordinate the group members' efforts toward some given goal." Elaborating further, Fiedler and Garcia[11] characterized a leader as a person " . . . who develops and maintains sufficient cohesiveness and motivation among group members to keep then together as a functioning unit." Yukl[12] concluded leader effectiveness was most commonly measured by a group's successful performance of assigned

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[8]Marlene Kramer and Claudia Schmalenberg, "Magnet Hospitals: Part I: Institutions of Excellence," Journal of Nursing Administration 18, no. 1 (1988): 13-24.

[9]Abraham Zaleznik, "Managers and Leaders: Are They Different?" Journal of Nursing Administration 11, no. 7 (1981): 26.

[10]Fred E. Fiedler and Joseph E. Garcia, New Approaches to Effective Leadership: Cognitive Resources and Organizational Performance (New York: John Wiley, 1987), 2.

[11]Ibid.

[12]Gary A. Yukl, Leadership in Organizations (Englewood Cliffs, NJ: Prentice-Hall, 1981).

tasks resulting in the attainment of unit goals which contributed to organizational goals.

Naisbitt and Aburdene[13] indicated that vision, commitment, shared power, and responsibility were major characteristics of effective leaders. Leadership behavior which ". . . respects people and encourages self-management, autonomous teams, and entrepreneurial units" was viewed as essential for guiding persons toward their best performance and creating work environments which can respond quickly to change.[14] The leader accomplished these goals by inspiring commitment and empowering workers through creating shared authority. These behaviors described by Naisbitt and Aburdene reflect the key attributes of a transformational leader. This type of leader achieved worker understanding and commitment to a new organizational vision by focusing on individual follower growth and development. According to Bass,[15] the transformational leader was concerned with guiding follower performance to a higher level of achievement through building self-confidence, arousing motivation through persuasion and symbolic interactions, mentoring, and developing problem solving skills.

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[13]John Naisbitt and Patricia Aburdene, Megatrends 2000 (New York: William Morrow and Company, 1990), 218, 223.

[14]Ibid., 218.

[15]Bernard Bass, Leadership and Performance Beyond Expectations (New York: Free Press, 1985), 14-32.

Hospital organizations have begun to recognize the need to assist hospital nurse leaders in the development of effective leader behaviors.[16] Improved work competence and performance were believed to improve as the leader's positive self-perception increased.[17] More positive nurse leader self-perception as a "pygmalion" effect of improved leader competence has been suggested by Weiss[18] as a possible outcome of well designed in-service and continuing education offerings. In Hodges et al investigation of hospital nurse leader characteristics, the researchers concluded that organizational expectations for nurse leaders exceed the formal educational preparation of persons in these roles.[19] There have been some attempts to meet these expanded role demands through hospital developed leadership programs.[20] Additionally, no association between type of basic nursing education and prediction of successful

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[16]Fralic, "Head Nurse Role," 659-70.

[17]Abraham Korman, "Industrial and Occupational Psychology," (1971) in How to Motivate Today's Workers, ed. William Rosenbaum (New York: McGraw-Hill, 1982), 35.

[18]Marjorie Weiss, "Improving Management Skill through Staff Development," Journal of Nursing Staff Development 5, no. 4
(1989): 177-179.

[19]Hodges, Knapp, and Cooper, "Head Nurses," 43.

[20]Elizabeth A. Hefferin, "Evaluation of In-Service Effectiveness," in Dimensions of Nursing Administration: Theory, Research, Education, and Practice, ed. Beverly Henry and others (Boston: Blackwell Scientific, 1989), 399-422.

leadership has been reported.

The leadership profile of nurse leaders was described as changing following completion of a graduate program in nursing administration.[21] Findings from an investigation by Kirsch revealed a significant decrease in dependence and a significant increase in achievement and humanistic-helpful characteristics. A profile of participants completing this graduate level leadership development educational program revealed nurse leaders with the following characteristics: achieves goals, helps others performs at their best, and maintains open and spontaneous relationships. These reported behaviors were similar to characteristics of transformational leadership.

The influence of informal education as a strategy for developing more effective nurse leader behaviors has not been reported. However, modeling and group interaction have been long accepted as factors which influence adult learning. Mentorship, as a strategy for developing self-confidence and clinical expertise during a person's initial entry into nursing practice has been extensively described. Limited empirical study of mentorship as related to nurse executive development has also been reported. However, the contribution of mentorship to the leadership development of hospital nurse leaders (head nurses) has not been

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[21]Joanne Kirsch, The Middle Manager and the Nursing Organization (Norwalk, CN: Appleton & Lange, 1988), 228.

investigated. Since inspiring workers to exceptional performance through individual growth and development has been described as the cornerstone of transformational leadership, development of informal educational processes to promote leadership development appear to be a needed strategy.

Purpose

Effective leader behavior has been described as a major factor influencing survival of organizations into the twenty first century. Developing the practice of transformational leadership among hospital nurse leaders was a strategy suggested to enhance organizational productivity and, therefore, survival of professional nursing practice.[22] In order to develop educational content and successful teaching strategies for facilitating the development of transformational leader behavior in the work setting, identifying formal and informal educational activities which have contributed to a transformational leadership style was of paramount importance. Therefore, this study examined the type of educational activities experienced by hospital nurse leaders that they perceived as important in the development of a transformational leadership style.

For purposes of this research it was assumed that nurse

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[22]Anne M. Barker, Transformational Nursing Leadership: A Vision for the Future (Baltimore: Williams & Wilkins, 1990), 19-37.

leaders evolved as a result of many factors. Educational activities of the nurse leader were viewed as one of multiple factors contributing to development of a particular leadership style.

Statement of the Problem

Perhaps different formal or informal leadership educational activities were experienced by nurse leaders exhibiting a high degree of transformational leadership behavior as compared to those nurse leaders using a lesser degree of transformational leadership behavior. Identification of the leadership development content and the teaching-learning design associated with formal educational processes would provide specific information regarding the formal education of these leaders. Data concerning informal educational activities described as important to the development of transformational leaders could also be similarly explored. The combined formal and informal experiences deemed important by the transformational leader would then provide a model for teaching transformational leadership.

Definition of Terms

Specific terms used throughout this study were operationally defined to provide clarity of meaning and avoid confusion associated with terminology that often has different and incongruent meanings in the literature.

Transformational leader. An individual who demonstrates visionary (transformational) leadership is defined by Sashkin.[23] Visionary leader behavior is associated with three primary behavioral attributes which include: specific charismatic leader behaviors, personality characteristics, and culture building abilities. For purposes of this study, this behavior was measured by the Leadership Behavior Questionnaire developed by Sashkin.[24]

Hospital nurse leader. A full time registered nurse having twenty-four hour responsibility for the delivery of effective and efficient nursing service to a hospital nursing unit patient population and who was designated by positional authority and title as the nursing unit leader.

Formal educational activities. Those structured educational programs perceived by the participant to result in the award of a course grade, certificate of completion, continuing education units, or some written document indicating achievement of specific learning objectives related to leadership development. For purposes of this study, these activities were measured by the Leadership Development Inventory (Formal Education Scale), a researcher developed instrument, and clarified through use of an

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[23]Marshall Sashkin, The Visionary Leader Trainer Guide: Leader Behavior Questionnaire, 3rd ed. (King of Prussia, PA: Organization Design & Development, 1988), 1.

[24]Ibid.

in-depth interview technique.

Informal educational activities. Those unstructured educational activities perceived by the participant to contribute to the development of the participant's leadership ability and skill. Informal activities included but were not limited to mentorships experienced, on-the-job training, participation as a member of committee or task force, chairing a committee or task force, attended or conducted work setting meetings, attended or conducted professional organization meetings, being an officer for a professional organization, and collegial exchange. For purposes of this study, these activities were measured by the Leadership Development Inventory (Informal Education Scale) and clarified through use of an in-depth interview technique.

Learning content. The information or knowledge perceived by the participant as being disseminated during a formal leadership development activity. For purposes of this study, this variable was measured by the Leadership Development Inventory (Formal Content Scale) and clarified through use of an in-depth interview technique.

Learning design. The participant's perception of strategies or methods used during a formal leadership development activity. For purposes of this study, this variable was measured by the Leadership Development Inventory (Formal Strategy Scale) and clarified through use

of an in-depth interview technique.

Valued learning experiences. The importance assigned by the participant to each learning experience. For purposes of this study, this variable was measured by each scale of the Leadership Development Inventory and clarified through use of an in-depth interview technique.

Limitations of the Study

The following limitations were acknowledged as having potential for influencing internal validity and generalizability of findings.

1. Subjects were from only one geographic region of the United States, and their characteristics may vary when compared to a larger national sample. However, as no empirical study of transformational hospital nurse leaders has been reported, these findings provided a beginning data base for future investigative comparison.

2. Subjects' participation through convenience sampling technique may have introduced sample bias. In order to reduce any bias created by this technique the entire accessible population in one geographic region was sampled. This approach was deemed appropriate for initial investigation of study variables.

3. Self-reported perceptions of leadership behaviors may not represent actual leadership behavior. Direct measurement of behavior requires labor intensive observation

which may alter the usual behavior of observed subjects. Issues of adequate sample size may also occur. The multiple concerns inherent in this limitation could not be fully addressed by this investigation.

4. As no instrument for measuring educational activities of subjects was available, a researcher developed instrument was used to measure this variable creating a potential threat to instrument validity. In order to diminish this situation, procedures to enhance content and face validity were initiated. Local and national experts were used as content validators. Pilot testing was utilized for examining subject understanding of items.

5. Isolating a single variable (educational activities) that may influence development of leadership style may have threatened validity of findings. Multiple factors have been identified as influencing leader development. Control of many of these factors was not possible. The focus of this study was to investigate variables that may be controlled through educational design.

CHAPTER II

Introduction: Theoretical Frameworks

Leadership has been defined by Zaleznik[1] as using power to influence the thoughts and actions of others. The leader was described as being active and involved thereby creating images and expectations that changed the way people thought about what was possible or desirable. This description of leadership matches the primary proposition of transformational leadership theory: organizations guided and directed by transformational leaders are more effective.[2] The organizational effectiveness is believed to be related to the leader's ability to consistently demonstrate specific leader behaviors that are inculcated into the culture of the organization.

However, transformational leadership theory alone does not explain how or why an individual develops a specific leadership style. The transformational leader's selection of and participation in specific educational processes can

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[1]Abraham Zaleznik, "Managers and Leaders: Are They Different?" Journal of Nursing Administration 11, no. 7 (1981): 26-31.

[2]Bernard Bass, Leadership and Performance Beyond Expectations, (New York: Free Press, 1985), 14-32.

be explained by using concepts of adult learning and social cognitive theory. Adult learning theory suggests individuals seek educational activities to solve current problems that exist in their work life.[3]

This proposition from theory supports the participation in both formal and informal educational activities by transformational leaders. Why and how certain behaviors or skills presented during educational activities are incorporated into the leadership style of an individual can be explained using key elements of social cognitive theory. This theory proposes that individuals acquire expectations regarding the effectiveness of self-initiated behavior based on observing role models.[4] Furthermore, this idea supports the acquisition of transformational leader behaviors learned through mentorship experiences.

The concept of individual problem solving from adult learning theory and self-initiated behavior change based on expectancy and reward have been suggested as contributing to development of transformational leadership. Based on these beliefs, transformational leadership theory, adult learning theory, and social cognitive theory were selected as the theoretical frameworks for this study.

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[3]Malcolm Knowles, The Modern Practice of Adult Education (New York: Association Press, 1980).

[4]Albert Bandura, Social Foundations of Thought and Action (Englewood Cliffs, NJ: Prentice-Hall, 1986), 160-77.

Transformational Leadership Theory

Transformational leadership theory suggests why and how a leader becomes effective and sustains effectiveness. The theory suggests that transformational leaders create and maintain an organizational culture committed to the continued growth and development of the workers. The leader's vision for the future is clearly and consistently articulated to the worker along with an action plan that is implemented for the purpose of achieving the visionary goal. In presenting this theoretical model, transformational leadership as a concept is first defined followed by a discussion of behaviors associated with this leadership style. The relationship between transformational leader vision and organizational effectiveness is described. Research findings lending support to each theoretical concept are also integrated. Finally, the application of transformational leadership theory to the acute care hospital setting and specifically the nurse who functions as the leader for a designated hospital nursing unit is considered. Relevant research findings from the nursing literature are used to support the ideas presented.

Transformational Leadership Defined

Transformational leadership, as a theoretical concept, was first defined by James McGregor Burns. Burns[5] defined the transformational leader as an individual having the ability to create visions. These visions were followed by leader actions that transformed followers and societies. According to Sashkin and Fulmer[6] successful or effective transformational leaders believe they can have an impact on the organization. These leaders have a high need for power that is expressed through pro-organizational action rather than personal dominance.

The effective leader's need for power and the pro-organizational use of power has been documented by McClelland and Burnham.[7] Recent research by Jaques[8] documented the relationship between appropriate cognitive development and visionary span. The "action framework" of

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[5]James McGregor Burns, Leadership, (New York: Harper & Row, 1978), 19-20.

[6]Marshall Sashkin and Robert M. Fulmer, "Toward an Organizational Leadership Theory," in Emerging Leadership Vistas, ed. J. G. Hunt and others (Boston: Lexington Books, 1987).

[7]David McClelland and David H. Burnham, "Power Is the Great Motivator," Harvard Business Review (Jan./Feb., 1976): 100-10.

[8]Elliot Jaques, "The Development of Intellectual Capability," Journal of Applied Behavioral Science 22, no. 4 (1986): 361-83.

organizational function developed by Parsons[9] and recent research on organizational culture by Schein[10] provided the foundation for the culture building component of transformational leadership theory.

Transformational leaders use visionary leadership to transform organizations through use of five specific charismatic behaviors: focusing attention on specifics; risk taking that creates opportunities for others to join in; skillful two-way communication that includes active listening and feedback; consistent, trustworthy behavior with follow through on commitment; and active, expressed concern for people that reinforces self-worth of others and self.[11] These behaviors represent basic charismatic characteristics associated with visionary leaders identified by Bennis and Nanus[12]. Both Bass[13] and Sashkin[14] concluded that charismatic behaviors allowed the transformational

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[9]Talcott Parsons, Structure and Process in Modern Societies (New York: Free Press, 1960), 16-58.

[10]Edgar Schein, Organizational Culture and Leadership (San Francisco: Jossey-Bass, 1985).

[11]Marshall Sashkin, "The Visionary Leader: A New Theory of Organizational Leadership," in Charismatic Leadership in Management, ed. J. A. Conger and R. N Kanungo (San Francisco: Jossey-Bass, 1988), 122-160.

[12]Warren Bennis and Burt Nanus, Leaders (New York: Harper & Row, 1985).

[13]Bass, Leadership and Performance, 14-32.

[14]Marshall Sashkin, "A New Vision of Leadership," Journal of Management Development 6, no. 4 (1987): 19-28.

leader to create an organizational culture and a set of beliefs that guide organizational members toward sustained high performance. Thereby, both the follower and the organization were transformed.

With transformational leader behaviors, the goal is to improve organizational productivity by focusing on individual follower growth and development.[15] Both Sashkin[16] and Stoner-Zemel[17] reported that higher levels of transformational leader behavior were associated with more positive employee perceptions of the work place. Transformational leaders were characterized as persons who have charisma and focus on consideration and stimulation of the individual for the purpose of motivating followers (workers).[18] While studying 256 leaders from a Fortune 500 firm, Bass[19] reported that the transformational factors of charisma, individualized consideration, and intellectual stimulation were significantly correlated ($r = .88$, $p < 0.01$; $r = .77$, $p < 0.01$; & $r = .70$, $p < 0.01$) with employee

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[15]Bass, Leadership and Performance, 15.

[16]Marshall Sashkin, The Visionary Leader Trainer Guide: Leader Behavior Questionnaire, 3rd ed. (King of Prussia, PA: Organization Design and Development, 1988), 1.

[17]M. J. Stoner-Zemel, "Visionary Leadership, Management, and High Performing Work Units" (Ph.D diss., University of Massachusetts, 1988), Dissertation Abstracts International 48 (1988).

[18]Bass, Leadership and Performance, 14-32.

[19]Ibid.

satisfaction with supervisors. In transforming the organizational culture, the visionary leader was able to: identify the sequence of activities most likely to result in the five to twenty year vision, analyze a specific situation, implement the behaviors necessary to achieve the goal, adapt behaviors as situational factors change, match task and employee capability, inspire through trustworthy and consistent communication, empower all levels of employees, and make a positive difference in the organization by influencing others to risk joining in.[20]

Leader Attributes and Organizational Effectiveness

Transformational leadership has been identified as being present in manufacturing plants, international oil companies, churches, and medical centers. Research findings by Sashkin[21] and Bass[22] revealed that visionary leadership had been clearly associated with positive organizational outcomes. Leaders with a high degree of transformational leadership had more productive organizations than leaders with a low degree of transformational leadership. Factors identified as significantly contributing to effectiveness

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[20]Marshall Sashkin and Robert M. Fulmer, "A New Framework for Leadership: Vision, Charisma, and Culture Creation, 1985" TMs [photocopy], p. 23-27, Personal Collection, Marshall Sashkin, Department of Education, Washington, D. C.

[21]Sashkin, The Visionary Leader, 5.

[22]Bass, Leadership and Performance, 14-32.

included the extent the managers were seen as contributing to organizational requirements and meeting job related needs of workers ($p < 0.01$).[23] The major conclusion offered by Bass was that transformational leadership contributed to employees' extra effort, effectiveness and satisfaction with the leader.

Transformational Nursing Leadership

Professional nursing has been described as currently experiencing a leadership crisis. Factors identified as contributing to this crisis included: a decrease in nurse leader credibility, organizational productivity deficits, and changing work values of the staff nurse.[24] A specific factor determined as adversely affecting work commitment of nurses was limited opportunity for professional growth and development in conjunction with specific leader attitudes and behavior.[25] Additional factors frequently cited as having an influence on job commitment included: lack of professional autonomy as result of organizational hierarchy and lack of status and power within the work position.

Transformational leadership provides the nurse leader with a new approach for creating professional, autonomous

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[23]Bass, Leadership and Performance, 224.

[24]Anne M. Barker, Transformational Nursing Leadership: A Vision for the Future (Baltimore: Williams and Wilkins, 1990), 3-4.

[25]Ibid., 2-4.

work environments that promote job satisfaction and organizational success. Transformational leaders have been reported to achieve success by facilitating ". . . change, innovation, empowerment of others, and power with others not to others".[26] In other words, the leader transformed the work environment through empowerment of others. Kirsch[27] concluded success in nursing organizations today was dependent on the presence of nurse leaders who ". . . nurture, encourage, and support the growth of transformational leaders in nursing."

Historically, the role of the nurse leader has been to use formal authority as a means of controlling and limiting subordinate participation in decision making.[28] Kirsch has predicted the pressure for change in nursing organizations will intensify during the next decade. The role of nurse leaders and their leadership styles were identified as critical factors in the successful transformation of bureaucratic organizations to professional work environments.[29] Only one study was reported in the literature which specifically measured the utilization of

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[26]Ibid, 39.

[27]Joanne Kirsch, The Middle Manager and the Nursing Organization (Norwalk, CN: Appleton and Lange, 1988), 90.

[28]Howard L. Smith and Nancy W. Mitry, "Nursing Leadership: A Buffering Perspective," Nursing Administration Quarterly 18, no. 3 (1984): 44.

[29]Kirsch, Middle Manager, 9-19.

transformational leadership style by nurses. However, investigation of variables which clearly represent components of transformational leadership have been reported. In analyzing these findings two major themes related to transformational leadership emerged: 1) leader behavior and employee satisfaction and 2) organizational effectiveness.

Nurse Leader Behavior and Employee Satisfaction

The hospital nurse leader is expected to function as a visionary leader in the hospital nursing organization of today. Examination of hospital nursing leadership behaviors has revealed the importance of the leader's ability to focus on follower concerns and needs, and to effectively communicate interest in and support for the follower. These behaviors were identified as key factors contributing to staff nurse job satisfaction. Motivators frequently identified by nurses as contributing to job satisfaction included: having the opportunity for creative, challenging, and role-appropriate work; acts of recognition; and a chance to advance in one's own skills and the nursing profession.[30]

Recent investigations of job satisfaction among hospital nurses indicated dissatisfaction with the leader as a major factor in the decision to leave a job and the

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[30]Catherine Harman White and Maureen Claire Maguire, "Job Satisfaction and Dissatisfaction among Hospital Nursing Supervisors," Nursing Research 22, no. 1 (1973): 25-30.

nursing profession.[31] In a study of staff nurse retention twenty-five percent of 1,044 staff nurse participants described unfair nurse leaders who were unresponsive to staff nurse needs as a major factor in the decision to leave work.[32] The practice environment was described as lacking stimulation and learning opportunities. The researchers concluded that ". . . better relationship with nursing administration, especially head nurses, and recognized jobs which present regular opportunities for fuller practice [are needed to promote staff nurse job satisfaction]".[33]

Head nurse leader behavior that focused on worker consideration was identified as being related to staff nurse job satisfaction ($r=.55$, $p<.001$).[34] Findings supported the premise that staff nurses having head nurses who demonstrated concern for needs of the worker experienced more job satisfaction. Work units specifically designed to promote staff nurse autonomy had head nurses who demonstrated higher relationship leader behavior than did

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[31]Florence L. Huey and Susan Hartley, "What Keeps Nurses in Nursing: 35,000 Nurses Tell Their Story," American Journal of Nursing 88, no. 2 (1988): 181-88; "Nursing Shortage Poll Report," Nursing 88 18, no. 2 (1988): 33-41.

[32]Patricia A. Prescott and Sally A. Bowen, "Controlling Nursing Turnover," Nursing Management 18, no. 6 (1987): 60-66.

[33]Ibid., 66.

[34]Mitzi L. Duxbury, Gordon D. Armstrong, Debra J. Drew, and Susan J. Henley, "Head Nurse Leadership Style with Staff Nurse Burnout and Job Satisfaction in Neonatal Intensive Care Units," Nursing Research 33, no. 2 (1984): 97-101.

head nurses on nursing units not promoting autonomous work.[35] The head nurses using relationship leader behavior focused on caring for personnel and enhancing communication. Staff nurses experiencing these leader behaviors reported higher levels of job satisfaction.

Similar findings were reported in a study of most important nurse leader characteristics by Meighan.[36] Respect or earned admiration by the staff was ranked as most important. Responses indicative of important relationship oriented characteristics included caring, flexible, supportive, available, interested, easygoing, reasonable, willing to listen, and fair. These behaviors closely approximated transformational characteristics.

In an examination of specific tasks associated with the head nurse role, seventy-one tasks were grouped under seven categories.[37] Descriptions of each category revealed a theme of interpersonal interaction between the head nurse and staff for all categories with one category specifically designated as leading. The leading category for head nurse role specific tasks included behaviors associated with

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[35]Patricia Maguire, " Staff Nurse's Perceptions of Head Nurses' Leadership Styles," Nursing Administration Quarterly 11, no. 1 (1986): 34-38.

[36]Mary Meighan, "The Most Important Characteristics of Nursing Leaders, Nursing Administration Quarterly 15, no. 1 (1990): 63-69.

[37]Katherine Kay O'Neil and Karen Lee Gajdoskik, "The Head Nurse's Managerial Role," Nursing Management 20, no. 6 (1989): 39-41.

transformational leadership. Furthermore, Dunham and Klafehn[38] recently identified transformational leadership as a dominant leader behavior exhibited by a national sample of hospital nurse executives. However, no specific studies of transformational leadership in hospital nurse leaders (head nurses) were discovered in this literature review.

Organizational Effectiveness of Nurse Leaders

Criteria for organizational excellence have been described by Peters and Waterman. Behaviors and characteristics of nurse leaders in hospitals meeting these criteria of excellence were synonymous with those of transformational leaders. Nursing leadership in these organizations was described by staff nurses as accessible, approachable, trust building and proactive. The nurse leaders were characterized by Kramer and Schmalenberg[39] as using open communication and demonstrating a people orientation to management. The organization was transformed into an environment where nurses were valued and actively participated in decision making. The outcome for these nursing organizations was improved productivity thereby contributing to the hospital goal of efficient and effective

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[38]Jane Dunham and Keith Klafehn, "Transformational Leadership and the Nurse Executive," Journal of Nursing Administration 20, no. 4 (1990): 28-33.

[39]Marlene Kramer and Claudia Schmalenberg, "Magnet Hospitals: Part I: Institutions of Excellence," Journal of Nursing Administration 18, no. 1 (1988): 13-24.

work units.

In order to facilitate development of these leadership skills and abilities, it was necessary to consider why and how individual nurse leaders decided to adopt a specific leadership style. Adult learning theory offered one plausible explanation for this process and was, therefore, suggested as a supporting framework to this investigation.

Adult Learning Theory

The initial assumptions of Adult Learning Theory were described in the seminal work of Lindeman. Although the work was conducted some time ago, these assumptions continue as the framework for adult learner educational activities and include:[40]

1. Adults are motivated to learn as they experience needs and interests that learning will satisfy; therefore, these are the appropriate starting points for organizing adult learning activities.

2. Adults' orientation to learning is life-centered; therefore, the appropriate units for organizing adult learning are life situations, not subjects.

3. Experience is the richest resource for adults' learning; therefore, the core methodology of adult education is the analysis of experience.

4. Adults have a deep need to be self-directing; therefore, the role of the teacher is to engage in a process of mutual inquiry with them rather than to transmit his or her knowledge to them and then evaluate their conformity to it.

5. Individual differences among people increase with age; therefore, adult education must make optimal

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[40]Edward C. Lindeman, The Meaning of Adult Education (New York: New Republic, 1928), 118-9.

provision for differences in style, time, place, and pace of learning.

These assumptions provided insight for the questions of why and how nurses in leadership positions sought specific educational activities. This theme was explicated by first defining adult learning theory, then tracing its application to leadership development in nursing.

Adult Learning Theory Characteristics

Knowles' model of andragogy--". . . the art and science of helping adults learn" was based on Lindeman's theory.[41] Originally, Knowles contrasted andragogy with pedagogy--helping children learn. The two models are now regarded as parallel rather than antagonistic. Key assumptions of andragogy posited by Knowles were:[42]

1. As a person matures, his or her self-concept moves from one of dependent personality toward one of a self-directed human being.

2. An adult accumulates a growing reservoir of experience, a rich resource for learning. For an adult, personal experiences establish self-identity and so are highly valued.

3. The readiness of an adult to learn is closely related to the developmental tasks of his or her social role.

4. There is a change in time perspective as individuals mature, from one of future application of knowledge to immediacy of application; thus, an

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[41]Malcolm Knowles, "Gearing Adult Education for the Seventies," Journal of Continuing Education 1, no. 1 (1970): 38.

[42]Malcolm Knowles and others. Andragogy in Action (San Francisco: Jossey-Bass, 1984), 44.

adult is more problem centered in learning.

A schema for modes or types of learning based on concepts of adult learning theory was developed by Houle.[43] Three modes of learning were posited: inquiry, performance, and instruction. Learning in the inquiry mode is achieved by reflection and as a by-product of an experience indirectly related to the area of knowledge deficit. Achievement of skill or ability that is acquired by observation of others and reinforced in the work setting resulting in habitual use represents the performance mode of learning. The instruction mode is goal based with information being provided by formal instruction such as a teacher, self-instruction packets, or programmed instruction.

Based on these premises of adult learning theory, the adult learner was portrayed as self-directed with a problem-centered approach to learning. Urbano and Jahns[44] proposed a conceptual framework for nurses participation in continuing education. Interaction between the environment of the individual and the individual as a unique being was viewed as influencing purposeful participatory behavior.

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[43]Cyril O. Houle, The Inquiring Mind (Madison, WI: The University of Wisconsin Press, 1961), 3-30.

[44]Mary Theresa Urbano and Irwin R. Jahns, "A Conceptual Framework for Nurses' Participation in Continuing Education," Journal of Continuing Education in Nursing 19, no. 4 (1988): 182-86.

Motivational orientation was presented as the primary force contributing to participatory behavior. Demographic, life situation, and educational opportunity structure variables were hypothesized as positively and negatively moderating the relationship between participatory behavior and motivation orientation. Puetz and Peters[45] suggested that nurses, as adult learners, were concerned about meeting their own needs. These researches concluded that when information was perceived as needed or interesting adults demonstrated readiness and willingness to participate in learning activities.

Educational practices based on concepts of andragogy have been described by Knowles.[46] Teaching strategies used to facilitate the adult learning process included: establishment of a supportive learning environment; involvement of learners in mutual planning; involvement of participants in diagnosing their own learning needs; involvement of learners in formulating their own learning objectives and plans; and assistance for learners to carry out these plans and evaluate their learning experiences.

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[45]Belinda Puetz and F. Peters, Continuing Education for Nurses: A Complete Guide to Effective Programs (Rockville, MD: Aspen, 1981).

[46]Knowles, Andragogy, 45-46.

However, Holzemer[47] asserted that documentation of a relationship between learning styles and teaching styles for prescriptive purposes has not been empirically established. Further suggestions were offered: ". . . the content may require a teaching strategy that must take precedence over the hypothesized learning style. It may be necessary to utilize formal, structured lectures in order to introduce an audience to new and complex material."[48]

Adult Learning and Nurse Leadership Development

In an extensive examination of the nursing literature, no research reporting the influence of adult learning concepts on the development of transformational leadership in nurse leaders was discovered. However, recognition that certain adult learning principles which may influence the development of a specific leadership style may be controlled was important. That is, the educator has control of the formal classroom content and the methods used to present the content. Certain types of educational experiences experiences were posited as having more influence in the development of leadership style. However, in order to duplicate that experience, determining the type of activity, the method used to conduct the activity, and the content

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[47]William Holzemer, "Evaluation Methods in Continuing Education," Journal of Continuing Education in Nursing 19, no. 4 (1988): 148-57.

[48]Ibid., 151.

included during the activity was essential. Therefore, literature related to educational activities of nurse leaders relevant to discovering those activities that may contribute to development of transformational leadership is presented.

Education Needs of Nurse Leaders

Using adult learning theory as a framework, information regarding the education needs of nurse leaders was first examined. By knowing these needs, the impetus for seeking and learning new information may be discovered.

Head nurses at a tertiary care teaching hospital identified three categories of educational need: operational management, human resource development, and patient care management.[49] Findings indicated that educational needs of the head nurses were evenly distributed among the three categories. A need to evaluate results or performance was a common theme for both the patient care and operational management categories. In the human resources development category teaching/training and maintaining behavior items were most frequently identified as an educational need. The investigator suggested that since the majority of study subjects had participated in previous management educational activities, self awareness of

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[49] Vicki Ibarra, "Management Education Needs of Head Nurses", Journal of Nursing Staff Development 5, no. 1 (1989): 36-39.

educational needs may have been enhanced through this attendance. Furthermore, Ibarra postulated that program participation may have also served as a learning motivator. That nurse leader study participants sought educational activities to solve work related problems was a major conclusion by Ibarra. In addition, occurrence of positive outcomes as a result of these educational activities were believed to serve as a stimulant to seek further learning.

Learning Style of Nurse Leaders

The premise that nurse leaders used educational activities as one solution for solving current work related problems was accepted. Therefore, discovering how this group learned became crucial. As discussed earlier, Houle designed a three-factor model for teaching. Recently, this model was amended by Oddi, Roberson, and Ellis[50] by subdividing the instruction learning mode into self-instruction and group-instruction dimensions. Thus, the four-factor model now contained an inquiry, performance, self-instructional, and group-instructional mode. These investigators reported that registered nurses with a baccalaureate degree in nursing who received their initial nursing education in a diploma school of nursing used the

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[50]Lorys F. Oddi, Jean E. Altman Roberson, and Alice J. Ellis "Continuing Learning Among Registered Nurses Employed in a Community Hospital," Journal of Nursing Staff Development 5, no. 1 (1989): 30-35.

inquiry mode of learning more frequently than nurses with an associate degree in nursing or nurses having a baccalaureate degree as the initial entry to nursing. According to adult learning theory, learners are viewed as self-directed and the degree of self-direction is dependent on the developmental stage and past experience of the adult. Therefore, knowing the nurse leader's previous and current level of formal educational achievement would be a crucial factor for consideration when designing educational programs.

Educational Activities of Nurse Leaders

Nurse leaders may have experienced a variety of formal and informal educational activities. Educational experiences of nurse leaders were explored to determine the influence of these activities on nurse leadership development. These data were perceived to be necessary for the design of an educational program intended to influence development of a particular leadership style. The literature was examined to determine if data regarding the influence of formal and informal educational activities on leadership style development had been reported.

Formal Educational Activities

Inservice education represents one form of formal educational experience frequently provided by the employer for the nurse leader on a regular basis. Inservice programs

reported in the literature between 1950 and 1986 were examined by Hefferin[51] to determine their impact on improvement in nursing practice. Fourteen of the sixty-nine programs identified were related to nursing leadership development. A summary of the educational activities and outcomes of the leadership development programs are presented.

The most frequently used teaching strategy was a seminar format followed by formal lecture as the second most frequently used approach. Three educational methods comprised the third most frequently used teaching design: a preceptor experience, assignments, and debriefing. Some inservice programs incorporated multiple strategies for a single program. No particular activity was associated more frequently with a measurable improvement in leadership ability and skill. Thirteen different educational outcomes were identified with some programs reporting more than one outcome. Therefore, for these fourteen programs, no specific design contributed to the development of a more effective leader.

Graduate education programs in nursing administration as reported in the literature were also examined. Reported findings indicated a change in leadership behavior and

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[51]Elizabeth A. Hefferin, "Evaluation of In-Service Effectiveness," in Dimensions of Nursing Administration: Theory, Research, Education, and Practice, ed. Beverly Henry and others (Boston: Blackwell Scientific, 1989), 399-422.

leadership effectiveness were associated with program completion. Transformational leadership, as a specific outcome of graduate education has not been measured. For purposes of this investigation, the effect of graduate education on the development of leader behaviors descriptive of transformational leadership were examined.

The behaviors described as being present following completion of graduate education in nursing administration included: a decrease in dependence as a behavioral characteristic decreases,[52] an increase in humanistic and achievement behavioral styles, and achievement of higher levels of leadership effectiveness.[53] These findings were also supported by the work of both Kirsch[54] and Ulrich.[55] Kirsch concluded that empirical evidence indicates that ". . . graduate education for nurse managers has benefits beyond the cognitive domain."[56] That is, this additional knowledge contributes to less dependent behavior leading to improved leadership practice.

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[52]Charles Lafferty, Level One Life Style Inventory (Plymouth, MH: Human Synergistics, 1979); Kirsch, Middle Manager, 85-91.

[53]Maria Koszalka, "Preparing Nursing Leaders," Nursing Management 21, no. 7 (1990): 23.

[54]Kirsch, Middle Manager, 208.

[55]Beth Tamplet Ulrich, "Value Differences Between Practicing Nurse Executives and Graduate Educators," Nursing Economics 5, no. 6 (1987): 287-91.

[56]Kirsch, Middle Manager, 208.

Informal Educational Activities

Following this review of formal educational activities of nurse leaders, the influence of informal activities on nurse leadership development is reported. Limited information regarding informal processes that may influence development and maintenance of a particular leadership style was gleaned from the literature. One case report focusing on the head nurse role supported to mentorship as an important area of informal leadership development. This head nurse described a leadership development process that included experiences of role confusion, role conflict, role incompetence, and loss of self-worth and value. The following excerpts provided insight into the process of becoming a nurse leader.

> . . . there was much information . . . but there was little guidance for successfully making the transition from staff nurse to head nurse, . . . I felt unsure of what to do with my time when I did not assign myself to patient care, I found myself avoiding the unknown, unwilling to take risks, and afraid to make mistakes, being a manager was lonely, and . . . was afraid to admit that frequently I did not know what to do.[57]

In spite of these negative experiences, a specific resource for leadership development was described as contributing to feelings of improved self-worth and a sense of accomplishment. The leadership development process utilized follows: "Thus, it was important to develop a strong,

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[57]Janet M. Rice, "Transition from Staff Nurse to Head Nurse: A Personal Experience," Nursing Management 19, no. 4 (1988): 102.

supportive relationship with the supervisor or director, and I used this resource frequently when faced with difficult problems or decisions -- or simply to voice frustrations. Weekly meetings have worked well for me."[58] This qualitative case report revealed mentorship to be an important area of nursing leadership development.

Mentorship was also supported as a viable mode for leadership development by the adult learning theory concept of mutual inquiry as an adult learning need. With mutual inquiry the learner and teacher together explore possible solutions and achieve mutual consensus regarding the selected process rather than the teacher evaluating learner conformity to teacher prescribed solutions. The process evolves as a result of past experiences of the learner as well as the teacher. This type of teaching-learning exchange matches the mentorship process described by Zaleznik.

Mentors were described as teachers, tutors, advisors, sponsors, host, coaches, guides, and role models who are self-disciplined and honest.[59] Specific behaviors

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[58] Ibid.

[59] Carolyn Boyle and Sharon James, "Nursing Leaders as Mentors: How Are We Doing?" Nursing Administration Quarterly 15, no. 1 (1990): 44-48: Linda Yoder, "Mentoring: A Concept Analysis," Nursing Administration Quarterly 15, no. 1 (1990): 9-19; Cynthia Prestholdt, "Modern Mentoring: Strategies for Developing Contemporary Leadership," Nursing Administration Quarterly 15, no. 1 (1990): 20-27.

associated with the mentoring functions of teaching, sponsoring, encouraging, counseling, and befriending were enumerated by Prestholdt.[60] These behaviors focused on caring interaction between mentor and protege which include demonstrating an actual skill, providing observation and feedback about protege performance, and offering support. According to May, Meleis, and Winstead-Fry,[61] role clarification, role rehearsal, and role modeling emerged as strategies used by mentors to facilitate role development in mentees. Mentoring relationships were described as evolving over a three to ten year period based on Yoder's[62] extensive literature review. This review revealed nurses seeking to enter into a mentoring relationship desired mentors with the following characteristics: knowledgeable, provide challenging assignments, serve as a role model, provide acceptance, confirm mistakes, and are both a friend and counselor. In Yoder's model for mentoring increased job satisfaction, retention, and professionalism were depicted as outcomes of this interpersonal process. In a survey of 84 hospital nurses in mid-level management positions, the most significant ($p=0.001$) mentoring relationship was

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[60]Prestholdt, "Modern Mentoring," 24.

[61]Kathleen M. May, Afaf I. Meleis, and Patricia Winstead-Fry, "Mentorship for Scholarliness: Opportunities and Dilemmas," Nursing Outlook 30, (1982): 22-28.

[62]Yoder, "Mentoring," 11.

between supervisor and subordinant.[63] Additional survey findings suggest those nurses assuming first time leadership positions were most in need of mentoring. Boyle and James recommended the use of mentoring as a key strategy for teaching essential leadership skills. Guiding proteges through formal and informal power structures was identified by Hamilton[64] as the mentor's most important task.

Mentoring as a strategy for developing contemporary nursing leadership was explored by Prestholdt.[65] Registered nurses at a large midwestern hospital reported receiving "some mentoring" with 43% experiencing "guidance from several influential persons."[66] The encouragement of informal mentoring and development of formal mentoring programs as methods for improving professional development were recommended by Fagin and Fagin.[67] This approach to career development was supported by Clawson[68] who believes that ". . . individuals can learn from the intellectual, interpersonal, and career management behavior of their

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[63]Boyle and James, "Nursing Leaders as Mentors," 46.

[64]M. S. Hamilton, "Mentoring: A Key to Nursing Leadership," Nursing Leadership 4, no. 1 (1981): 4-13.

[65]Prestholdt, " Modern Mentoring," 20-27.

[66]Ibid., 81.

[67]M. M. Fagin and P. D. Fagin, "Mentoring Among Nurses," Nursing and Health Care 4, no. 2 (1983): 81.

[68]James G. Clawson, "Is Mentoring Necessary?" Training and Development Journal 39, no. 4 (1985): 39.

immediate supervisors." Sponsorship, as one aspect of mentoring, was described by Campbell-Heider[69] as having information which allowed one to perform job responsibilities at a high level of effectiveness. Elaborating further Campbell-Heider suggested sponsorship needs change as nurses accepted positions of leadership within organizations.

The literature has revealed the educational needs, learning needs, and educational strategies associated with nurse leaders and their leadership development. In addition the learning modes of nurses with various types of educational preparation have been studied. A leadership model to guide curriculum development for nursing administration programs in graduate education has been proposed by Carrol.[70] The model is based on the values, critical thinking, and leadership style attributes associated with successful women managers in business. Carrol suggested using the model to identify skill, characteristics, and abilities of the nurse leader and match these factors with job requirements. However, no studies describing methods for preparing nurses to function specifically as transformational leaders were discovered.

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[69]Nancy Campbell-Heider, "Do Nurses Need Mentors?" Image: Journal of Nursing Scholarship 18, no. 3 (1986): 110-13.

[70]Theresa Carrol, "Characteristics of Nurse Managers: Defining a Model for Management Selection," Journal of Nursing Administration 17, no. 10 (1987): 4.

In examining the leadership development education activities of transformational hospital nurse leaders, adult learning theory has been posited as influencing the educational activities selected and valued. The selection and valuing of learning activities has been suggested as being influenced by key concepts associated with social cognitive theory.

Social Cognitive Theory

Learning activities selected and valued by transformational hospital nurse leaders have been explained by adult learning theory. However, in order to explain the transfer and consistent use of the learned behavior from the safety of the instructional environment to the work place additional rationale were considered. Selected concepts from social cognitive theory offered plausible explanations for why the behavior was attempted and then maintained by the nurse leader in the hospital setting. The aspects of this theory having relevance to this investigation are presented and supported by empirical data. These areas of interest are then applied to the educational leadership development practice of nurse leaders. Support for these recommendations is provided from a review of nursing research related to these processes.

Theoretical Concepts

Bandura[71] has proposed that persons learn as a result of social expectancies associated with a particular behavior. If the initiated behavior was positively rewarded both by the individual (internal reward) and the environment (external reward), the person expected the behavior to result in continued reward when repeated. When that expectation was confirmed, the behavior was reinforced and became a part of that individual's normative response pattern.

The social origin of behavior and the importance of cognitive thought processes is the emphasis of social cognitive theory. As circumstances in the environment change, the person responds with variable behavior that is specific to the circumstance. Bandura[72] offered the following explanation for this sequence of social events.

> In the social cognitive view people are neither driven by inner forces nor automatically shaped and controlled by external stimuli. . . . In the social cognitive view persons are active agents who exercise some influence over their own motivation and actions.

Social cognitive theory contains both structure and process components.[73] Primary structural factors include the concepts of self and goals. According to the theory,

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[71]Bandura, Social Foundations, 254-55.

[72]Ibid., 255.

[73]Lawrence A. Pervin, Personality: Theory and Research 5th ed. (New York: John Wiley and Sons, 1989), 387.

self perception is one cognitive process in a set of processes. Self-efficacy, a central construct of the theory, represents one aspect of self perception.

Self-efficacy is defined as a person's judgement of his ability to perform tasks relevant to a specific situation.[74] Based on this definition, self-efficacy becomes a factor which influences the activities chosen for participation by a person. It also influences how much effort is expended in a situation, the length of time for persisting given obstacles, thought patterns initiated while involved in a task, and the emotional response to an anticipated or actual situation.[75] The theory postulates self-efficacy as a judgement of ability to control situational outcomes or reinforcers. Therefore, according to Bandura,[76] people who perceive self as highly efficacious act, think, and feel differently than those who perceive self as inefficacious. That is, thought patterns, motivation, performance, and emotional arousal are cyclical and positively spiraling dependent on the degree of self-efficacy present.

Goals, a structural component of the theory, relate to the ability to anticipate the future, be self-motivated, and take certain actions expected to positively influence the

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[74]Ibid.

[75]Albert Bandura, "A Self-efficacy Mechanism in Human Agency," American Psychologist 37 (1982): 123.

[76]Bandura, Social Foundations, 390, 395.

achievement of standards or the desired outcome.[77] Goals assist the individual to establish priorities thereby organizing behavior over time. Bandura and Cervone[78] indicated that goal achievement or performance was best when individuals were aware of goals and received feedback on progress toward achievement. In addition the performance effort was most intent when individuals were dissatisfied with substandard performance and experienced high self-efficacy for standard attainment. These propositions of social cognitive theory attributed to Bandura have been supported by voluminous empirical study.[79]

A second perspective of social cognitive theory is concerned with the process of learning. Observational learning and self-regulation represent this perspective.[80] The ability to learn complex behavior by watching others independent of reinforcement is the process of observational learning.[81] The observed person is referred to as a model. Research has demonstrated that observation of consequences

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[77]Pervin, Personality, 388.

[78]Albert Bandura and Daniel Cervone, "Self-evaluative and Self-efficacy Mechanisms Governing the Motivational Effect of Goal Synthesis," Journal of Personality and Social Psychology 45 (1983): 1017-28.

[79]Pervin, Personality, 380-403; 406-27.

[80]Ibid, 389.

[81]Ibid., 389-90.

to a model effects performance of the oberver's behavior.[82] Yoder[83] suggested consequences have potential for being both positive and negative.

Vicarious learning, another type of observational learning, is defined as the learning of emotional reaction through observing others and develops in a similar manner.[84] Positive characteristics of both the model and the observer's valuing of these characteristics influence if the learner exhibits the vicariously learned behavior.[85]

The process of observational and vicarious learning have application to mentorship. Mentorship, as described by Zaleznik, Yoder, Prestholdt, and Boyle and James, referred to an intense emotional relationship between an experienced and inexperienced leader. Yoder[86] specifically included role modeling as a psychosocial component of mentoring. Role modeling by the experienced leader is believed to result in the inexperienced leader emulating characteristics of the experienced leader. Role modeling differs from mentoring in that no personal relationship needs to exist

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[82]Albert Bandura, Dorthea Ross, and Shelia A. Ross, "Imitation of Film Mediated Aggressive Models," Journal of Abnormal and Social Psychology 66 (1963): 3-11.

[83]Yoder, "Mentoring," 16.

[84]Bandura, Social Foundations, 185.

[85]Pervin, Personality, 392.

[86]Yoder, "Mentoring", 15-16.

between the model and imitator. Modeling occurs through internalizing another's (the model) standards which now become standards for self (the imitator).

The inexperienced leader's acceptance and practice of the experienced leader's characteristics is also dependent on the concept of self-regulation. Self-regulation would also explain the leader's willingness to initiate behaviors and skills taught in formal educational settings. Evidence regarding the importance of self-regulation has been reported by Bandura.[87] Individuals were described as internally rewarding self for achieving self-prescribed standards. The desire to achieve a goal, the belief that it can be accomplished, and achievement of the intended outcome determines if the self internally rewards itself. External rewards are also an evaluative factor in determining if goal achievement occurred so that internal self reward can be given. This recursive behavior pattern is believed to be responsible for generating cognitive support for some leader behaviors and the rejection of others.

This framework proposes that behavior maintenance occurs as a result of anticipated outcomes (expectancies) and rewarding self for attaining a set standard (self-reinforcement). The expectancies and self-reinforcement behaviors are processes that allow people to change

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[87]Bandura, "Self-efficacy," 122-47.

environmental contingencies that effect their behavior.[88] The environmental change is produced through anticipating the future, setting standards, and the expectancy of reward (internal and external) that is associated with goal achievement. These behaviors also represent the essence of transformational leadership: having a vision for the future, developing and implementing plans to achieve that vision, and creating a culture that supports the futuristic vision.

In the cultural transformation of the organization expectancy and self-regulation, as leader behaviors, relate to the transformational leader's commitment to meeting the growth and development needs of the worker. The worker becomes unhappy (dissatisfied) with the status quo due to the leader's articulation of a possible future that is perceived as better than the present. Through inspirational leadership and intellectual stimulation based on trust and open communication, the leader invites the worker to join in striving for an improved organization through giving performance beyond the expected. These elements of transformational leadership are supported by social cognitive theory as previously described.

Social Cognition and Nurse Leadership Development

The nursing leadership literature consideration of

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[88]Pervin, Personality, 393.

social cognitive theory as a direct factor in leadership development is sparse. However, studies focusing on self-directing behavior, observational experiences, and amount of leadership experience were identified which support the assumptions of this investigation. Again, these reported studies were not focused on nurse leaders identified as having a transformational style but on nurse leaders generally. Correlations are drawn between these general nurse leader findings and findings expected to be present with transformational leadership.

Self-directing Behaviors of Nurse Leaders

Self-regulation, as a major component of social cognitive theory, is believed to influence the selection, initiation, and continuation of specific behaviors. Self-fulfilling learning as reported by Nielson[89] provided an incentive for seeking continued learning experiences. Motivation, interest, and achievement in learning became cyclical phenomena when the learning experience met the expectation of the learner.[90] This outcome conformed with Bandura's discussion of goal achievement and reward as connected, cyclical, spiraling events.

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[89]Beverly B. Nielson, "Applying Andragogy in Nursing Continuing Education," Journal of Continuing Education in Nursing 20, no. 2 (1989): 86-90.

[90]N. W. Dolphin and B. J. Holtzclaw, Continuing Education in Nursing: Strategies for Lifelong Learning (Reston, VA: Reston Publishing, 1983).

Observational Learning Experiences of Nurse Leaders

The importance of observation for skill development as a part of adult continuing education was described by Cox and Baker.[91] When supportive praise and reinforcement for new skills were provided by the immediate supervisor, adaptation to the newly acquired skills continued. This finding correlated with the idea of external reward as a factor in the decision to continue learned behavior. External reward was perceived by the leader as an indication of goal achievement and therefore allowed the learner to internally reward self. As the behavior and external rewards continued, self-reward continued. The learner now expected positive outcomes and used self-regulation to accentuate the process. In the Boyle and James[92] survey, 79% of the nurses reported having experienced a mentoring relationship. Strong, significant relationships ($r=0.78$, $p<0.01$) were present between positive changes in career and a mentoring experience by these 84 nurses. These researchers suggested that continuation of learned behavior was dependent on more than just the seeking of a solution to a problem.

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[91]Cheryl L. Cox and Marion G. Baker, "Evaluation: The Key to Accountability in Continuing Education," Journal of Continuing Education in Nursing 12, no. 1 (1981): 11-19.

[92]Boyle and James, "Nurse Leaders as Mentors," 45.

Amount and Type of Nurse Leader Experience

Adult learning theory suggested that the developmental stage of the adult learner influences the educational activities sought. Social cognitive theory expanded this idea by positing that continuation of learning was contingent on what one expected to happen and the match between expectancy and actual outcome associated with utilization of the learned behavior in the work setting. A major theme present in the nursing literature was related to this idea. As years of experience in nursing leadership positions increased leadership effectiveness increased. This relationship was reported by Adams[93] and McCarty.[94] Adams[95] asserted ". . . that CNE (Chief Nurse Executive) effectiveness is tied to actual experience in the role not simply to experience in nursing administration." These findings supported the self-efficacy and expectations tenets of Bandura's theory. One possible conclusion from the investigations by Adams and McCarty is that as nurse leaders gained experience in their role, they judged themselves as able to succeed and expect positive outcomes to emerge from

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[93]Carolyn Adams, "Leadership Behavior of Chief Nurse Executives," Nursing Management 21, no. 8 (1990): 36-39.

[94]J. A. McCarty, "A Study of the Relationship Between Leadership Behaviors of Hospital Nurse Administrators and Selected Demographic Variables - A North Central Study" (Ph.D. diss., Ball State University, 1985), Dissertation Abstracts International 46 (1986): 3007B.

[95]Adams, "Leadership Behavior," 39.

behavior initiated.

A secondary theme related to nursing leadership experience was also identified by Adams.[96] Those nurse leaders with Master of Science degrees or greater scored higher on leader effectiveness. Support for these findings were provided by Reynold's[97] and Malone.[98] However, Reynolds[99] reported on-the-job experience, an informal educational activity, as the only finding significantly influencing the leader's perception of administrative problems as difficult. An additional unanticipated finding was the discovery that nurse leaders with mentors experienced more difficulty with administrative problems. The following explanation of this finding was provided, "Academic mentors may not be familiar with the skills needed in the clinical setting, or clinical mentors may be unprepared to teach administrative skills."[100]

When considering mentorship as an informal educational activity that may influence development of leadership style,

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[96]Ibid.

[97][Reynolds], "Consider This . . . Preparation for Practice, Journal of Nursing Administration 15, no. 11 (1985): 6, 13.

[98]P. F. Malone, "Cognitive Style and Leadership Adaptability of Managers, Doctoral Dissertation, University of Oklahoma, 1984)", Dissertation Abstracts International, 45 (1984): 1268-69A.

[99][Reynolds], "Preparation for Practice," 13.

[100]Ibid.

the Reynold's finding created disturbing questions. Educational leadership development activities, whether formal or informal, were intended to improve not decrease leader effectiveness. Further insight regarding this concern was offered by Ulrich.[101] Values of practicing nurse leaders and graduate educators teaching nurses who aspire to become leaders were significantly different. Specifically, the nurse leader group valued control more and solitude less than the nurse educator group. Control was defined as having the opportunity to accept a leadership role and be responsible for others' work performance. Valuing situations characterized by the absence of close relationships was the definition for solitude.

The conflict in values held by practicing nurse leaders and teachers of potential nurse leaders has major implication for the learner's effectiveness as a leader. The effect of role socialization on performance has been extensively described by Kramer[102], Hardy and Conway[103], and

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[101] Ulrich, "Value Differences," 287-91.

[102] Marlene Kramer, Reality Shock: Why Some Nurses Leave Nursing (St, Louis: C. V. Mosby, 1974).

[103] Margaret E. Hardy and Mary E. Conway, Role Theory: Perspectives for Health Professionals (Norwalk, CN: Appleton-Century-Crofts, 1978).

Hinshaw.[104] Graduate student values changed and converged toward faculty values through no intentional effort of the faculty.[105] Furthermore, this change in student values occurred in as little as nine months of faculty influence.

A dilemma has been created by these findings. Individuals engaged in the formal educational leadership development activity of graduate education in nursing administration frequently experience mentoring by a graduate faculty member. Faculty mentorship has been categorized as an informal activity that may occur as a part of the formal experience of graduate education. Students having this experience may have developed values that conflict with the organizational culture created by the nurse executive leader. Development of this situation has the ability to produce leader role dissonance for the graduate. When evaluating this outcome, selected concepts of social cognitive theory may be useful. External rewards from the teacher have the ability to foster continuation of a value. The expectancy factor suggests that continuation of the behavior will result in further external reward. When

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[104]Ada Sue Hinshaw, " Role Attitudes: A Measurement Problem," in Role Theory Perspectives for Health Professionals, ed. Margaret E. Hardy and Mary E. Conway (Norwalk, CN: Appleton-Century-Crofts, 1978), 260-65.

[105]Margaret A. Williams, Dorothy W. Bloch, and Eunice M. Blair, "Values and Value Changes in Graduate Nursing Students: Their Relationship to Faculty Values and to Selected Educational Factors," Nursing Research 27 (1978): 181-89.

external reward occurs, the student is able to internally reward self, thereby, activating the self-regulation function. Therefore, the mentor selected can have dramatic influence on the leadership style adopted. However, the adopted style may not meet the norms of the organization which the nurse desires to lead.

At this point, it seems important to consider if transformational leadership is a process that can be taught and learned. Zaleznik[106] has suggested that, "There are no known ways to train 'great' leaders." In contrast Sashkin and Fulmer have contended that not only can visionary (transformational) leadership be learned, but it can be practiced by any leader. The potential for development of transformational leadership is viewed as a matter of degree. The leader's ability to develop this leadership style is believed to be greater than the current level of performance. A belief that leadership can be developed by individuals was also espoused by Burns.[107] Research also indicated that nurses engaged in graduate education in nursing administration demonstrated a positive change in leadership behavior following program completion. Though these programs were not designed to teach transformational leadership, instruction contributed to development of

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[106]Zaleznik, "Managers and Leaders," 26.

[107]Burns, Leadership, 20.

behaviors congruent with a transformational leadership style. Therefore, that exposure to an educational program designed to specifically teach transformational behaviors, characteristics, and culture building skills would logically result in increased knowledge and practice of this leadership style is anticipated.

Summary

Transformational leadership theory, adult learning theory, and social cognitive theory have been used to gain insight regarding the development of leadership style. The concepts of self-efficacy, self-regulation, and expectancies associated with social cognitive theory were presented as support for the use and refinement of behavioral responses demonstrated by transformational nurse leaders. As the nurse leader's tenure within a particular role and within the hospital organization extends, leadership issues may arise which require acquisition of additional learning that cannot be explained by transformational leadership or adult learning theory concepts alone. Therefore, the nurse leader is thought to seek a new learning experience for the purpose of achieving problem resolution. The desired new information may be acquired via formal or informal educational processes. After having obtained the relevant knowledge, the nurse leader then initiates the knowledge in the work setting in the form of a new or modified leader

behavior. The expectation by this adult learner, the nurse leader, is that initiation of the newly learned behavior will result in positive external and internal reward. With the occurrence of the social expectation, a positive reward, the behavior is reinforced and continues. Therefore, those newly learned and reinforced leader behaviors are valued and become entrenched as part of the nurse's individual leadership style (see figure 1). Investigating those learning activities experienced and valued by hospital nurses identified as transformational leaders, is expected to result in the emergence of an educational model for transformational leadership development in hospital nursing. The following research questions were investigated based on these beliefs.

Research Questions

Are there differences in the amount of formal and informal leadership development educational activities of hospital nurse leaders with a high degree of transformational leadership behavior as compared to those hospital nurse leaders with a lesser degree of transformational leadership behavior?

Are there differences in the importance of formal and informal leadership development educational activities of hospital nurse leaders with a high degree of transformational leadership as compared to those hospital

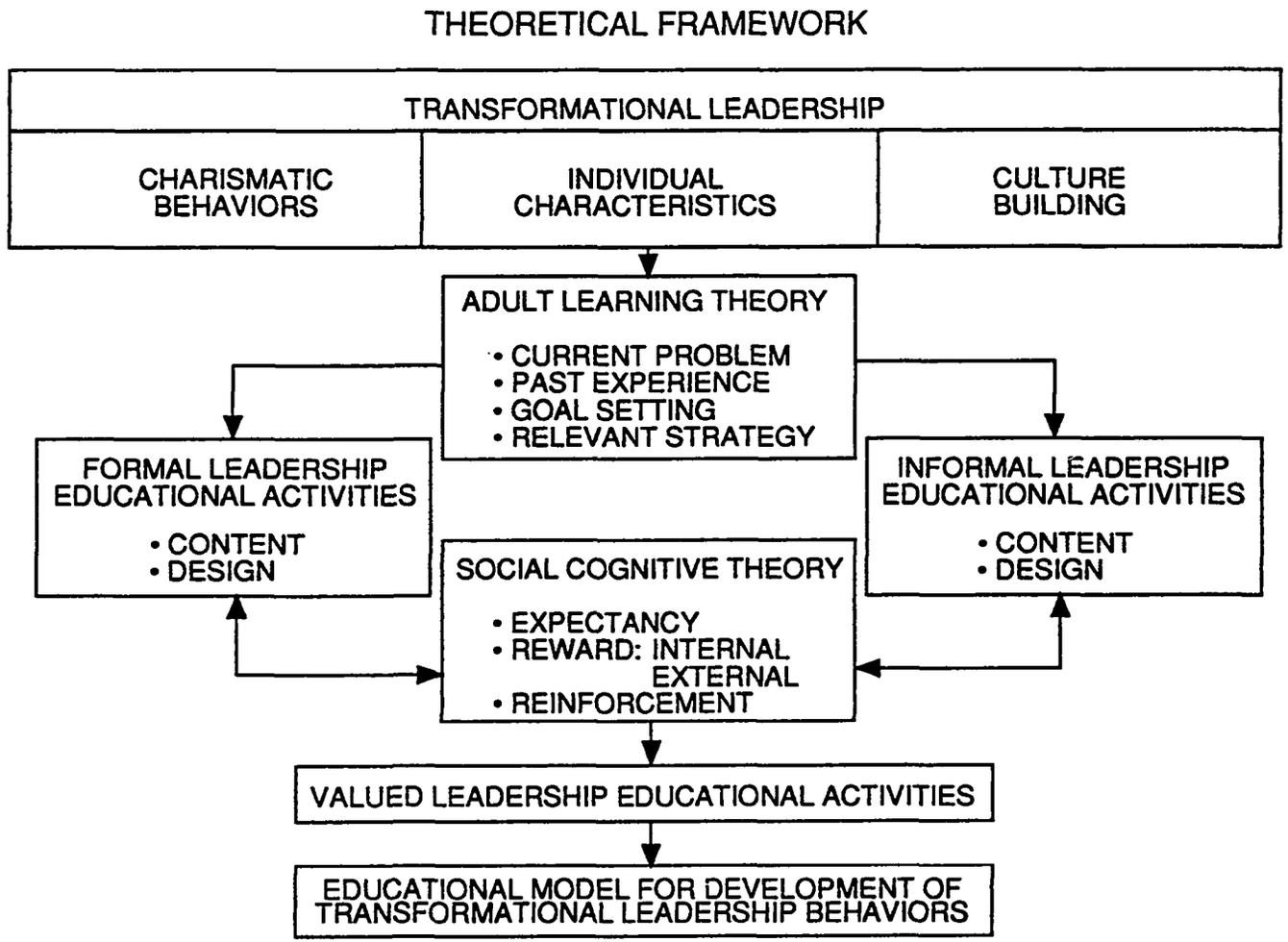

Figure 1. Model for Transformational Leadership Development

nurse leaders with lesser degree of transformational leadership behavior?

Are there differences in the amount or importance of formal educational content experienced by hospital nurse leaders with a high degree of transformational leadership behavior as compared to those hospital nurse leaders with a lesser degree of transformational leadership behavior?

Are there differences in the amount or importance of formal teaching strategies experienced by hospital nurse leaders with a high degree of transformational leadership behavior as compared to those hospital nurse leaders with a lesser degree of transformational leadership behavior?

CHAPTER III

METHODOLOGY

Research Design

This ex post facto or causal-comparative study was designed to explore the causal relationships among the nonmanipulative variables and degree of transformational leadership. This type of design is used to study phenomena existing in the present which are linked to other phenomena that occurred in the past.[1] Possible cause for a phenomenon may be identified through the exploration of a characteristic that is present in one group and absent or present to a lesser degree in another group.[2] The sample, hospital nurse leaders, differed on one critical variable, leadership style. The sample was comparable otherwise in that all participants held the same position (unit leader) within similar organizations. Job requirements for this position were also similar between organizations.

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[1]Denise F. Polit and Bernadette P. Hungler, Nursing Research: Principles and Methods, 3rd ed. (New York: J. B. Lippincott, 1987), 147-50.

[2]Walter R. Borg and Meredith D. Gall, Educational Research: An Introduction, 4th ed. (New York: Longman, 1983), 533-4.

When using an ex post facto design, possible causes for variation in behavior are identified which may later be investigated using an experimental approach. Therefore, the major disadvantage to this research design was the inability to establish causality.[3] However, since it provided the data needed for initially investigating potentially causally linked behavioral responses, it served as an essential precursor to rigorous experimental design.

Sample and Setting

More nurses are employed in acute care hospitals than any other type of health care facility.[4] Within the hospital, the nursing department represents the largest group of hospital personnel. Therefore, hospital nurses in unit leader positions were selected as the target population for this study. Hospital nurse leaders were defined as registered nurses having twenty-four hour responsibility for the delivery of effective and efficient nursing service to a hospital nursing unit patient population and who were designated by positional authority and title as the nursing unit leader. Hospital nurse leaders employed full time at acute care hospitals located in the cities of Norfolk, Virginia Beach, Chesapeake, Portsmouth, Hampton, and Newport

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[3]Polit and Hungler, Nursing Research, 152.

[4]Evelyn B. Moses, The Registered Nurse Population - 1988, (Washington, D. C.: U. S. Department of Health and Human Services, June, 1990), 52.

News served as the accessible population. The actual study sample was comprised of 66 hospital nurse leaders from the accessible population who chose to participate in this investigation.

Data Collection

The procedure for data collection was divided into two phases. Phase one provided data for categorizing participants as high, moderate, or low scoring transformational leaders. It also sought to explore the leadership development educational activities of each group. During the final phase of the study, data were then further examined using a smaller purposive sample in order to obtain a more detailed and rich description of leadership development experiences.

Phase One: Instrumentation

Leadership Behavior Questionnaire

In order to achieve the purpose of this study, practicing hospital nurses functioning as unit leaders who are characterized as having a high, moderate, or low level of transformational leadership were first identified. Collection of these data served as the basis for group assignment, therefore constituting a prerequisite for actual exploration of the research questions. The Leadership Behavior Questionnaire (LBQ) (appendix a), a psychometric

instrument, developed by Sashkin[5] was used for this purpose.

The LBQ assessed transformational leadership by measuring charismatic leader behaviors associated with visionary leadership, personality characteristics of leaders, and the ability of the leader to transform organizational cultures. The ten scales of the LBQ are based on theory as well as large-scale research findings. Charismatic leadership behaviors were measured by the first five scales of the LBQ. The categories for these five scales are: Focused Leadership, Communication Leadership, Trust Leadership, Respectful Leadership, and Risk-taking Leadership.[6]

The Focused Leadership Scale assessed the leader's ability to identify key elements of the future organization as envisioned and to articulate that image clearly and precisely to followers. Basic interpersonal communication skills were assessed by the Communication Leadership Scale. Leader reliability was assessed by the Trust Leadership Scale. Leader ability to consistently express concern for others' feelings while attending to own feelings was measured by the Respectful Leadership Scale. The final charismatic behavior scale, Risk Leadership, evaluated

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[5]Marshall Sashkin, The Visionary Leader Trainer Guide: Leader Behavior Questionnaire, 3rd ed. (King of Prussia, PA: Organization Design and Development, 1988), 1.

[6]Sashkin, Trainer Guide, 7-14.

leader ability to design risks that facilitate follower participation thereby making real the leader's vision for the future. According to Bennis and Nanus,[7] individuals who consistently use these five behaviors were perceived as charismatic leaders.

Personal characteristics of the leader were measured by scales six, seven, and eight. Research by McClelland and Burnham,[8] demonstrating effective leaders had a high need for power and used power to benefit the organization and its followers rather than create personal dominance, serves as the basis for scales six and seven. These two scales are categorized as Bottom-Line Leadership and Empowered Leadership. Bottom-Line Leadership, scale six, measured the belief by leaders that they can make a difference in the organization given their visions and actions taken to implement those visions. The leader's need for organizational power and the positive, productive use of power was assessed by the Empowered Leadership Scale, scale seven. The importance of cognitive development in creating a time span vision as a function of transformational

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[7]Warren Bennis and Burt Nanus, Leaders (New York: Harper and Row, 1985).

[8]David McClelland and D. H. Burnham, "Power Is the Great Motivator," Harvard Business Review (Jan./Feb., 1976): 100-10.

leadership has been documented by Jaques.[9] Measurement of the leader's time span vision was reflected in scale eight, Long-term Leadership. This scale evaluated the leader's ability to develop realistic visions that span one to two decades of organizational growth and development.

The last two LBQ scales, Organizational Leadership and Culture Leadership, measured the degree to which the leader was building a positive organizational culture. The leader's ability to effectively manage organizational change, goal achievement, teamwork, and maintenance of change were evaluated by the Organizational Leadership Scale. These factors were described by Parsons[10] as the "action framework" of organizational function. Recent research on organizational culture by Schein[11] was used to develop the Culture Leadership Scale, the last scale of the LBQ. This scale measured the extent to which the leader was able to inculcate the organizational culture with specific values and beliefs that create and promote excellence.

The LBQ is a 50 item five-point Likert-type scale instrument. Each of the ten scales contain five items. For

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[9]Elliot Jaques, "The Development of Intellectual Capacity," Journal of Applied Behavioral Science 22, no. 4 (1986): 361-83.

[10]Talcott Parsons, Structure and Process in Modern Societies (New York: Free Press, 1960).

[11]Edgar Schein, Organizational Culture and Leadership (San Francisco: Jossey-Bass, 1985).

each scale three items (60%) are stated positively with two items (40%) negatively worded to reduce social desirability bias. Anchors for each item range from a choice of "completely true" to "not true at all".

This third revision of the LBQ was based on instrument completion by over two thousand managers during the last five years.[12] In this third instrument revision minor revisions in item wording were made on the first five scales. A sixth scale serving as a check and balance system on the first five scales was deleted due to its redundancy as substantiated in earlier research by Sashkin and Fulmer.[13]

Major changes in this third version of the LBQ were introduced in the remaining five scales. The previously used scales measuring traditional leadership functions were deleted and replaced with scales measuring the leader's role in creating cultures that support excellence.[14] Emphasis was placed on assessing leader role in transforming both followers and organizations.

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[12]Marshall Sashkin, The Visionary Leader: Leader Behavior Questionnaire, 3rd ed. (King of Prussia, PA: Organization Design and Development, 1988), 1-2.

[13]Sashkin and Fulmer, "Leadership Theory"; Sashkin, "The Visionary Leader"; and Sashkin, "A New Vision of Leadership," 19-28.

[14]Sashkin, Leader Behavior Questionnaire, 1-2.

Instrument validity, the ability to measure what it is suppose to measure, has been explored from several perspectives. Content validity, the degree to which instrument items reflect appropriate content,[15] is based on the extensive theory and research data used as the foundation for the LBQ.

Concurrent validity, a measure of the relationship of test scores to a criterion measure administered at the same time or within a short time period,[16] is a type of association validity. According to Sashkin,[17] leaders having higher LBQ scores had more productive organizations, subordinates with more positive perceptions of the work environment and higher measures of culture associated with excellence. All reported data using the LBQ has been collected from actual organizations including manufacturing plants, international oil companies, churches, high schools, and medical centers. Therefore, the LBQ has clearly demonstrated concurrent validity.

Reliability of the instrument, a measure of the strength of the relationship among the items contained in a scale, has been examined using Cronbach's alpha. This latest version of the LBQ has consistently demonstrated

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[15]Polit and Hungler, Nursing Research, 324.

[16]Borg and Gall, Educational Research, 279.

[17]Sashkin, Leadership Behavior Questionnaire, 5.

improved reliabilities for the first five scales. The most current reported reliabilities based on Cronbach's alpha for the five leadership behaviors scales as compared to initial instrument reliability are listed in table 1.[18]

The ten scales of the LBQ form three clusters: Visionary Leadership Behavior, Visionary Leadership Characteristics, and Visionary Culture Building. Five items are present in each scale with each item having a possible score range of one to five.

Table 1.--Leadership Behavior Questionnaire Coefficients

	Reliability Coefficient	
LBQ Scale	1985	1988
Focus	.18	.52
Communication	.59	.74
Trust	.44	.75
Respectful	.57	.71
Risk	.18	.60

Scales one through five represent the Visionary Leadership Behavior cluster; the Visionary Leadership Characteristics cluster is reflected by scales six, seven, and eight, and scales nine and ten are designated as the Visionary Culture

[18]Marshall Sashkin and Robert M. Fulmer, "A New Framework for Leadership: Vision, Charisma, and Culture, 1985" TMs [photocopy], p. 4, Personal Collection, Marshall Sashkin, Department of Education, Washington, D. C.

Building cluster. Scores for each cluster are summed and may range from 25 - 125, 15 - 75, and 10 - 50 respectively for the behavior cluster, the characteristics cluster, and the culture building cluster. Each of the three clusters are summed to determine a total Visionary (transformational) Leadership score which may range from 50 - 250.[19]

For the purposes of this investigation, total visionary leadership scores of 201 - 250 were considered to indicate a individual demonstrating leader behavior, personal characteristics, and culture building associated with transforming organizations. Scores of 176 - 200 indicated individuals demonstrating a moderate level of transformational leader behavior and a low level of transformational behavior was considered to be present when scores range from 50 - 175.

Based on the extensive theory and research data used to develop and revise this questionnaire and the currently established validity supported by the improved reliability coefficients, the LBQ was deemed a reliable and valid instrument for assigning study participants to groups based on transformational scores.

Leadership Development Inventory

The formal and informal leadership development educational activities of each participant was measured

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[19]Sashkin, Leader Behavior Questionnaire, 9.

using the Leadership Development Inventory (LDI) (appendix b). Data regarding the type of experiences, content of experiences, design of experiences, and importance assigned to experiences were obtained. In addition data pertaining to the amount of formal education, formal content, formal teaching strategies, and informal education experienced were also collected.

The questionnaire utilizes predominantly a closed-ended design. This approach to questionnaire design was used because of its general efficiency related to administration, completion time, and response tabulation and analysis.[20] To offset the potential threat to accurate description of the leadership educational activities through use of forced responses, open-ended questions were also included. The open-ended questions allowed for a more detailed, spontaneous, and richer perspective of the respondent's perception of various leadership educational activities. This approach increased strengths and decreased weaknesses of a purely closed or open-ended format.[21]

Based on a review of leadership theory and nursing administration literature, items representing the content component of nursing leadership development were identified for the LDI. Teaching strategies associated with leadership

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[20]Polit and Hungler, Nursing Research, 232.

[21]Ibid., 233.

development were identified using the same process. In order to examine content validity, two local expert nurse leaders and two Old Dominion University nursing faculty members reviewed the LDI items for relevance and importance to the development of leadership ability and skill in hospital nurse leaders. Those items receiving both a rating of relevant and important by seventy-five percent of this four member panel were retained. During the second phase of instrument development, the LDI was rated for item importance by a national panel of twelve experts in nursing leadership. National panel members also represented academic and practice leadership expertise in nursing administration. Those items rated as important by seventy-five percent of participating panel members were retained. In the final phase of instrument development, the LDI was piloted using a convenience sample of practicing nurse leaders for the purpose of examining procedural performance of instrument instructions and face validity of items. Findings from the pilot testing resulted in deletion of additional items due to lack of item clarity. The actual formatting of the instrument was also redesigned based on recommendations from the pilot study participants.

The LDI contains four Likert-type rating scales, three sets of rank ordered data, four open ended questions, and demographic data. The four Likert-type scales used to measure the educational components of leadership development

are: the formal educational scale (FED), the informal educational scale (IED), the formal content scale (FCON), and the formal teaching strategies scale (FSTRA). The 136 items contained within these four rating scales are distributed as follows: FED scale, 18 items; IED scale, 25 items; FCON scale, 65 items; and FSTRA scale, 28 items. Anchors for the FED, IED, and FCON scale range from a choice of "very important" to "no importance". The FSTRA scale anchor range is from "very effective" to "not effective". Directions for completing each scale indicate that any item which represents an educational activity not experienced by the participant is to be omitted. Therefore, the scales allow measurement of the number of activities that participants have experienced as well as the importance or effectiveness of the individual items within the scale and the scale as a whole.

The possible range of importance scores for each scale is: FED, 0 - 90; IED, 0 - 125; FCON, 0 - 330, and FSTRA, 0 - 140. The amount scores ranges are FED, 0 - 18; IED, 0-25; FCON, 0 - 65, and FSTRA, 0 - 28. An importance or amount score of zero for any single scale only occurs if non-participation is associated with each item included in the respective scale.

In order to determine the relative importance ordering of formal and informal educational activities, the five most important activities within each of these scales are rank

ordered. These rankings allow for identification of the most important item within the FED and IED scales. The five most important items from the FED and IED scales are then combined to create a group of ten items. These ten items are then ranked ordered for importance. This procedure allows for determination of item importance regardless of whether it is a formal or informal leadership development educational activity.

Two open ended questions are designed to explore why a formal or informal educational activity was perceived as most important by the participant. Perceptions and measures of leadership satisfaction are queried in the final two open ended questions.

Demographic data pertaining to age, gender, and type of nursing education credentials were also requested. Additional leadership profile data collected included: years of leadership experience, number of years in current leadership position, hospital and unit bed size, and number of employees supervising. This refined questionnaire was then distributed to study participants.

Phase One: Procedure

In order to facilitate data collection procedures, the nurse executive in each hospital setting received a letter describing the purpose of the study, an overview of the procedure, a guarantee of both participant and agency

confidentiality, and a request for permission to contact potential study participants. This written introduction to the study was followed by a scheduled meeting with the nurse executive for the purpose of clarifying study purpose, data collection procedures, and establishing trust with the agency person who may either facilitate or inhibit the later data collection phases. At this meeting the nurse executive was given a brief data form to complete. A copy of the unit leader job description was also requested. This document served as a mechanism for validation of organizational similarity of group members, a criterion for the ex post facto design of this investigation. At this time the nurse executive also provided a list of nursing units and leader names.

In addition researcher permission was obtained to attend a regularly scheduled unit leader meeting for the purpose of explaining the study, describing the procedure and guaranteeing confidentiality of each unit leader participant. The Leadership Behavior Questionnaire (LBQ) and the Leadership Development Inventory (LDI) was distributed to each nurse leader at this meeting. A cover letter explaining the study purpose, the guarantee for nurse leader confidentiality, and providing instructions for completion and return of the survey packet was included. In addition a self-addressed stamped envelop was attached for return mailing. Completion and return mailing of the

questionnaires was construed to represent participant consent. Two weeks following distribution of the survey packet, a reminder notice was mailed to each potential participant. Two weeks following reminder notice mailing, data collection for phase one terminated.

Phase Two: Key Informant Interview

The educational activities contributing to the development of transformational leadership have not been empirically defined. Ethnographic design is often used to understand a phenomenon which has not been previously investigated.[22] In exploring the nurse leader's view of the world, emphasis was placed on researcher-participant interaction for the purpose of discovering the respondent's ". . . 'meanings' developed to guide their collective and individual actions".[23]

Goetz and LeCompte[24] define educational ethnography as the analytical recreation of social scenes and groups that describe the ". . . shared beliefs, practices, artifacts, folk knowledge, and behaviors . . ." of people engaged in a

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[22]James H. McMillan and Sally Schumacher, Research in Education: A Conceptual Approach 2nd ed. (Glenview, IL: Scott, Foresman & Co., 1989), 2-3.

[23]Ibid., 384.

[24]Judith P. Goetz and Margaret D. LeCompte, Ethnography and Qualitative Design in Education Research (Orlando, FL: D. C. Heath & Co., 1984), 2-3.

educational activity. Therefore, an inductive process results in the formulation of abstractions from the specific social constructions obtained in data gathering.[25] In educational ethnography detailed descriptions of educational activities are provided. The focus is on the contexts, activities, and beliefs of selected participants involved in these educational activities.[26] Therefore, ethnographic interviews were used to obtain data regarding how participants explained or "made sense" of the phenomenon being investigated (the leadership development educational activities of hospital nurse leaders having high, moderate, or low transformational leadership scores). An interview guide approach, a type of ethnographic interview, was used. This technique required the researcher to select topics for inclusion during the interview in advance while the sequencing and wording of the questions were decided as the participant-researcher interaction unfolded.[27]
Specifically, the strategy of key-informant interviews was used. This strategy allowed ". . . in-depth interviews of individuals who have special knowledge, status, or communication skills who are willing to share that knowledge

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[25]McMillan and Schumacher, Research in Education, 386.

[26]Ibid., 388.

[27]Ibid., 409-10.

and skill with the researcher."[28] The purpose of these interviews was further exploration of the five most important formal and informal leadership development educational activities with specific attention given to the respective content and design of each experience.

A purposive sample of study participants was selected from phase one of the study for individual in-depth interviews. Purposeful sampling allowed the researcher to increase the utility of information received from a small sample. The knowledge and information a particular sample was likely to have about the phenomenon of interest guided the selection process.[29] In order to be sure subunits (high, moderate, and low transformational leadership scores) of the major unit of analysis (transformational leadership) were included, the following purposiveful sampling strategies were employed:[30]

1. Typical-case selection. Two participants that match the leadership profile developed for a hospital nurse leader with LBQ scores indicating a moderate degree of transformational leadership were selected.

2. Extreme-case selection. Two participants having extremely high transformational scores and two participants having extremely low transformational scores were selected.

3. Critical-case selection. Two participants with high transformational leadership scores

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[28]Ibid., 406-7.

[29]Ibid., 395.

[30]Ibid., 184.

having experienced dissatisfaction with their respective leader behaviors and two participants with low transformational leadership scores having experienced dissatisfaction with their respective leader behaviors were selected.

Interview questions were classified according to the type of data sought. Patton[31] considered the following classifications appropriate for qualitative interviews:

1. Experience/behavior questions provide a description of the experiences, behaviors, actions, and activities engaged in by the participant.

2. Opinion/value questions reveal information about what a person thinks or believes about an experience, in essence a judgement of the experience.

3. Feeling questions lead to insight regarding how the individual reacted emotionally to an experience.

4. Knowledge questions provide the researcher with participants' factual information or their perception regarding a particular experience.

5. Sensory questions encourage a description of the experience using the five senses - what and how the experience is seen, touched, tasted, heard, or smelled.

6. Background questions allow the participants to describe themselves enabling the researcher to identify and locate the person in relation to the background of other respondents.

As the interview process evolved questions representing classification categories one through five were asked regarding the formal and informal educational activities identified as most important by each leader. Interview probes which allowed for the elaboration of detail or clarification were used based on response variation.

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[31]Michael Quinn Patton, Qualitative Evaluation Methods (Beverly Hills, CA: Sage, 1980), 207-8.

Background questions were interjected as appropriate during investigation of each topical area. Particular attention was given to the avoidance of dichotomous questions so that a conversational interactive rather than an interrogative tone was maintained for the interview.[32] Sample questions from each classification category are listed on the interview guide (appendix c).

An important consideration in establishing validity and reliability of interview data was the qualification of the interviewer. Though biased may be introduced when the researcher also serves as interviewer, qualifications of the investigator to function in this capacity had the potential to outweigh this disadvantage. For this study, the researcher's leadership experience including ten years of leadership experience in hospital nursing was deemed sufficient to meet the qualifications of an expert interviewer.

Phase Two: Procedure

A purposive sample of nurse leaders from each group who returned the questionnaires was selected for informant in-depth interviews. Purposeful sampling strategies guided the selection of key informants having special knowledge or status related to the respective leadership styles. A letter requesting individual participation in the interview

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[32]McMillan and Schumacher, Research in Education, 410.

process was mailed to each selected nurse leader. Seven to ten days following this mailing each nurse leader was contacted via telephone to arrange an interview appointment. At the time of interview each participant received a study information sheet describing the precise interview procedures, use of a tape recorder, use of interview recordings by the researcher, and assurance of confidentiality. Each participant signed an informed consent form. Following completion of these procedures, tape recording of the interview began.

Analysis of Results

In an effort to control for researcher bias, analysis of qualitative data were initiated first. Following completion of the qualitative analysis, quantitative data were examined using both parametric and nonparametric statistical techniques. Triangulation of qualitative and quantitative data was then conducted to determine if corroboration existed between the data sets. This approach controlled for any bias that may have been introduced had quantitative findings been determined first and then inadvertently driven the sorting and coding processes used during the qualitative phase of analysis.

Qualitative analysis of the ethnographic interviews was based on ". . . a systematic process of selecting, categorizing, comparing, synthesizing, and interpreting to

provide explanations of the single phenomenon of interest."[33] In this study the phenomenon investigated was the leadership development educational activities of three groups of hospital nurse leaders. The following data analysis cycle as described by McMillan and Schumacher[34] was used:

1. Identification of tentative themes and development of concepts and minitheories;
2. Categorizing and ordering data so that refinement of patterns and themes can occur; and
3. Assessing data trustworthiness so that understanding is refined.

This process of inductive analysis allowed the researcher to initiate a preliminary analysis through discovery of data categorization and ordering.[35] Strategies used to categorize and sort the data included: the process of constant comparison; multiple sorting or coding of each educational activity (type, content, design, and meaning); and indication of a tentative category name based on the attributes of each potential category. On the basis of empirical and logical sense, the categories were then enlarged, combined, subsumed, or new categories created. This process of analytical synthesis was used to propose grounded concepts and minitheories.

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[33]Ibid., 414.

[34]Ibid., 414.

[35]Ibid., 415-419.

The qualitative process of assessing data trustworthiness served as a validity and reliability measure for ethnographic research techniques used in this study.[36] The three major strategies used to accomplish this essential goal included searching for negative evidence, using triangulation, and constructing data displays. These techniques were used to offer the rigor required for substantiating findings of this study as both valid and reliable.

The organizational job description was characterized as a qualitative research data collection strategy known as artifact collections. Artifacts are "tangible manifestations of the beliefs and behaviors that form a culture, describe peoples' experience, knowledge, and behaviors and connote their values, feelings, and perceptions."[37] Concept analysis of these documents provided insight regarding the values and beliefs about nurse leaders by the employing organization.

Descriptive statistics were used to present demographic findings regarding sample participants. Analysis of variance was used to examine differences in amount and importance of formal and informal educational activities experienced by participants having high, moderate, and low

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[36]Ibid., 418.

[37]Ibid., 411-12.

transformational scores. Factorials using 3 x 2 x 2 designs were used to measure group differences and test for interaction effects of designated variables. The variables of transformational leadership, leadership experience, and type of nursing program (credentials) were examined for interaction with amount and importance of educational activities. Correlational procedures were used to further explore the relationships between educational variables and transformational leadership.

Validity and reliability of the Leadership Development Inventory was explored through a pilot study and following data collection for this study. Specifically, Cronbach's alpha was used to test for reliability of items associated with each scale of the LDI. Reliabilities were tabulated based on the total sample and by group. Comparison of these data were used to determine retention or elimination of an item as a group predictor. In addition since the Leadership Behavior Questionnaire had not been used with this sample population previously, reliability of this instrument was also explored.

Summary

This ex post facto study utilized both quantitative and qualitative methods to compare the amount and importance of formal and informal educational activities of hospital nurse leaders with three different levels of transformational

leadership. The sample consisted of 66 participants from hospitals in southeastern Virginia. The Leadership Behavior Questionnaire was used to measure the participant's degree of transformational leadership. The amount and importance of educational activities experienced by nurse leaders was measured by the Leadership Development Inventory. A purposeful sample of study participants were interviewed to further clarify responses regarding study variables. Methodological triangulation was used to determine if qualitative findings were corroborated by quantitative statistical procedures.

CHAPTER IV

RESULTS

This study explored the degree of transformational leadership present in hospital nurse leaders. The amount and importance of formal and informal educational activities were also examined regarding their role in the development of a transformational hospital nurse leader. An ex post facto design allowed investigation of the linkage between transformational leadership, a variable assumed to be present to some degree in the study sample, and formal and informal educational activities previously experienced by the participants.

Two instruments, the Leadership Behavior Question (LBQ) and the Leadership Development Inventory (LDI) provided self report data from study participants. The LBQ measured the degree of transformational leadership currently present while formal and informal educational activities (importance and amount) were recorded on the LDI. In addition four open-ended questions on the LDI and the qualitative technique of an in-depth interview and artifact collection (job descriptions) were also used in an effort to corroborate through triangulation of quantitative findings.

The sample included 66 nurse leaders representing 11 urban hospitals in southeastern Virginia.

Sample and Setting

The eleven urban hospitals participating in this study employed a total of 161 nurse leaders. Each participating hospital required that questionnaire packets be distributed at a regularly scheduled meeting of this group. Nurse leader attendance at these meetings was variable resulting in 109 questionnaires being distributed. Sixty-six questionnaires were returned creating a 61 percent response rate. Individual hospital response rate ranged from 95% to 16%. Demographic data pertaining to this study sample are identified in table 2.

For these 66 hospital nurse leaders more than half (54.7%) were 40 years of age or younger. Nationally, the percentage of total registered nurses who are male is 2.7% while in this sample of nurse leaders the percentage was only 1.5. One-half (50%) of the sample reported having either a nursing or non-nursing baccalaureate or higher degree. Comparable national data for nurse leaders was not available.

Participant career characteristics relevant to this study included nursing experience, leadership experience, and experience in current position. Experience in years for each variable is displayed in table 3.

Table 2.--Nurse Leader Demographic Data (N=66)

Item	Frequency	Range	$\bar{X}$	Median	SD
Age	100%(66)	27-64	40.59	40	7.91
Gender					
Male	1.5% (1)				
Female	98.5% (65)				
Education*					
ADN	10.6% (7)				
DIP	54.5% (36)				
BSN	40.9% (27)				
BNN	7.6% (5)				
MSN	7.6% (5)				
MNN	1.5% (1)				

ADN = Associate Degree in Nursing
DIP = Diploma in Nursing
BSN = Baccalaureate Degree in Nursing
BNN = Non-nursing Baccalaureate Degree
MSN = Master of Science in Nursing
MNN = Non-nursing graduate degree
*Note: More than one response is possible

Table 3.--Nurse Leader Career Characteristics (N=66)

Characteristic	Range	$\bar{X}$	Median	SD
Experience in Years				
Nursing	3-40	18.53	18	8.43
Total Leadership	1-35	9.39	8	6.53
Current Position	1-23	4.48	3	4.63

Though the mean nursing experience in years was 18.53, 30.3% (20) of these nurse leaders had more than 20 years of total nursing experience. The typical nurse leader's current position represented almost one-fourth (24.2%) of the nurse's total work experience while total leadership experience was equivalent to 50.7% or one-half of the participant's total nursing experience. Of the 66 respondents, 28.8% (19) had one to five years of total leadership experience with 71.2% (47) reporting over five years.

Leadership titles varied among the urban hospitals employing these nurse leaders. Five different titles were distributed among the sample as follows: 39.4% (26) were titled head nurse; 33.3% (22) were titled nurse manager; 16.7% (11) were titled administrator; and 7.6% (5) were titled director. One participant was titled coordinator.

Data regarding categorization of the 11 urban hospitals are listed in table 4. Hospitals categorized as tertiary, government, religious, and for-profit acute care facilities were also represented among the seven community hospitals. The total percent exceeds 100% because each hospital may be classified within multiple categories. Collectively, the seven community hospitals represented in this study employed more than half of the study participants (59%).

For purposes of this study hospitals were grouped based on bed size: small (0 - 199), medium (200 -399), or large

Table 4.--Hospital Category (N=11)

Category	Frequency*
Community	64% (7)
Tertiary	36% (4)
Government	11% (2)
Religious	11% (2)
For-profit	9% (1)

*Note: Hospital inclusion in multiple categories is possible

(400 or greater). Participants were employees of the hospital, and more specifically, the nursing organization within the hospital. The hospital allocated to the nursing organization a certain number of full time equivalent (FTE) positions. These positions reflected the number of nursing employees required to meet the nursing care standards for patient care. The number of FTE's allocated to the nursing organization was calculated according to patient hours of care per nursing unit based on pre-established state and national standards. The ratio (percentage) of registered nurse FTEs to non-registered nurse FTEs maintained by the nursing organization reflected the organization's commitment to employment of a professional worker. Data regarding hospital bed sized, nursing organization FTEs and registered nurse FTE percentages (RN%) are presented in table 5.

Table 5.--Hospital Characteristics

Characteristics	Range	$\bar{X}$	Median	SD
Bed size (N=11)	184-644	372.91	369	157.56
FTE (N=8)	186-764	364.62	240	217.94
RN % (N=11)	54-70	61.29	60	5.38

Using the established hospital size criteria, 24.2% (16) of the participants were employed in small hospitals, 31.9% (21) in medium hospitals, and 43.9% (29) in large hospitals. Twenty-six (39.4%) participants were working in nursing organizations with less than 300 FTE positions while nursing organizations having 300 or more FTE positions employed 36.4% (24) of the nurse leaders in this study. Full-time equivalent data were not reported by nursing organizations representing 16 participants. Fifty-one of the nurse leaders in this study were employed by nursing organizations having registered nurses represent more than 50% of the nursing division's workers. Registered nurse ratio was not reported for 15 participants. The nursing organization registered nurse to non-registered nurse ratio was 60 % or higher for 43.9% (29) of the nurse leaders.

A setting and sample profile emerged from these descriptive data. The typical urban hospital in this study was a 373 bed, community, acute care facility with

approximately 365 FTE positions in the nursing organization and with 61% of those positions occupied by registered nurses. The typical nurse leader participant was a 41 year old female with nine years of leadership experience.

Analysis

Quantitative and qualitative data analysis techniques were used to determine the role formal and informal educational activities had in the development of a transformational leadership style by this sample. Methodological triangulation was applied to determine the match of qualitative findings from in-depth interviews and job description analysis with quantitative results. To control for possible qualitative analysis bias that may have resulted from knowledge of quantitative findings, qualitative analysis was completed first.

Quantitative Analysis

Quantitative techniques employed included descriptive and parametric statistical procedures. Frequency distributions, measures of central tendency and variation were reported for the LBQ and LDI. Analysis of variance, a parametric procedure, allowed for testing of hypotheses about the presence of relationships between predictor and

criterion variables.[1] Through using a factorial design, ". . . each level of each factor studied is combined with each level of every other factor under consideration . . ."[2] forming a composite of all conditions. This procedure avoided the repetitive exploration of dependent variable influence by each factor.

In order to test the hypotheses of this study, differences in formal educational activities, formal content, formal teaching strategies, and informal educational activities were examined according to degree of transformational leadership present. Differences in both the importance and amount of each educational variable were measured.

To provide additional insight regarding findings related to difference testing, importance rankings of educational activities were also analyzed. Frequency distributions for the most important formal and informal educational activity were determined. In addition the most important educational activity was measured by ranking of formal and informal activities as one collective group. Responses to open-ended questions structured to measure factors influencing selection of an activity as most

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[1]Sam K. Kachigan, Statistical Analysis: An Interdisciplinary Introduction to Univariate and Multivariate Methods. (New York: Radius Press, 1986), 272-3.

[2]Ibid., 283.

important were also analyzed using the technique of sorting and constant comparison.

Relationships between components of transformational leadership (visionary behaviors, visionary characteristics, and visionary culture building), formal educational activities, formal content, formal teaching strategies, and informal educational activities were examined using the Pearson Product Coefficient. Regardless of direction, the following ranges for r cited by Munro were used to determine relationship strength in this study: 0.00 - 0.25, little, if any; 0.26 - 0.49, low; 0.50 - 0.69, moderate; 0.70 - 0.89, high; and 0.90 - 1.00 very high.[3] Since the relationship between transformational leadership and educational parameters was unknown, a two-tailed test was used for hypothesis testing.[4]

The final statistical procedure used for data analysis in this research study was investigation of instrument reliability. The Leadership Behavior Questionnaire (LBQ) had been used to investigate degree of transformational leadership present in various business organizations and the health care industry but not with nurse populations.

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[3]Barbara H. Munro, Madelon A. Visintainer, and Ellis B. Page, Statistical Methods for Health Care Research. (Philadelphia: J. B. Lippincott, 1986), 70.

[4]Denise F. Polit and Bernadette P. Hungler, Nursing Research: Principles and Methods, 3rd ed. (New York: J. B. Lippincott, 1987), 402.

Therefore, examination of instrument performance with this sample was important. The Leadership Development Inventory (LDI) requireed critical analysis of performance since it was a new, researcher developed instrument. Internal consistency, the extent to which all sub-parts are measuring the same characteristic, was used to examine the reliability of these two psychometric instruments. According to Polit and Hungler,[5] this procedure provides ". . . the best means of assessing one of the most important sources of measurement error in psychosocial instruments, the sampling of items." Currently, no one standard exists for acceptance of a reliability coefficient finding. Various levels of instrument coefficient alpha have been reported as acceptable. A coefficient of 0.60 was used in this study based on Polit and Hungler's recommendation for making group level comparisons.[6]

The LBQ coefficient alpha (Cronbach's alpha) for the total scale was 0.89 for this sample. Coefficients calculated for the three component parts of the LBQ were: 0.81 for the Visionary Behavior Scale (VBS), 0.69 for the Visionary Characteristics Scale (VCS), and 0.55 for the Culture Building Scale (CBS). Specific factors have been identified for each of three transformational clusters. The

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[5]Ibid., 319.

[6]Ibid., 322.

factors of Visionary Behavior include Focused Leadership (FOC), Communication Leadership (COM), Trust Leadership (TST), Respectful Leadership (RES), and Risk Leadership (RSK). Bottom-line Leadership (BLL), Empowered Leadership (EMP), and Long-term Leadership (LTL) are the factors for the Visionary Characteristics cluster of transformational leadership while the Culture Building cluster has the factors of Organizational Leadership (ORG) and Cultural Leadership (CUL). Reliability of the VBS, VCS, and CBS with their associated factors and total transformational (TFL) reliability for the Leadership Behavior Questionnaire (LBQ) is presented in table 6.

When using the study criteria of a 0.60 or higher coeffieient alpha, the VBS and VCS clusters were considered reliable with the CBS closely approximating this criteria. Of the five factors within the VBS cluster only the RES and RSK scale met the standard for acceptance. The LTL scale and ORG scale of the respective VCS and CBS clusters also had coefficients above 0.60. However, when examining reliability of the total LBQ as an internally consistent measure of transformational leadership (TFL), the coefficient alpha of 0.89 was impressive. As three of the VBS factors, two of the VCS factors, and one of the CBS factors had coefficient alphas below 0.60, bivariate

Table 6.--Coefficients for Leadership Behavior Questionnaire Scales (N=66)

Scale		Coefficient
Clusters		
VBS		0.81
	FOC	0.39
	COM	0.46
	TRT	0.20
	RES	0.65
	RSK	0.63
VCS		0.69
	BLN	0.45
	EMP	0.10
	LTT	0.72
CBS		0.55
	ORG	0.62
	CUL	0.23
Total TFL		0.89

relationships between these ten factors were explored (table 7).

Examination of these relationships revealed that five of the six scales with coefficient alphas below 0.60 had a non-significant, low relationship with one to three of the other factors. The two scales with the lowest coefficient alpha, TRT -0.20 and EMP - 0.10, had the lowest correlation with the other nine scales and with total transformational leadership (TFL). The EMP scale correlations ranged from

-0.10 to 0.34. Only the relationship between EMP and CUL was above 0.10 and it was the only significant relationship

Table 7.--Correlation between TFL Factors and TFL Factors with Total TFL (N=66)

	COM	TRT	RES	RSK	BLN	EMP	LTT	ORG	CUL	TFL
FOC	.44***	.26**	.55**	.46***	.41***	.00	.55***	.49***	.32*	.70***
COM		.23	.55***	.54***	.32**	-.04	.49**	.48***	.44***	.68***
TRT			.26*	.16	.24*	-.06	.27*	.22	.21	.39***
RES				.58***	.51***	.03	.61***	.66***	.41***	.79***
RSK					.53***	-.09	.52***	.56***	.40**	.75***
BLN						-.05	.54***	.57***	.42***	.71***
EMP							-.07	-.00	-.34*	-.10
LTT								.62***	.43***	.83***
ORG									.31**	.78***
CUL										.63***

*p<.05; **p<.01; ***p< .001

for the EMP scale. The EMP factor and TFL had a non-significant, inverse relationship (r=-0.10). All other factors had positive, significant relationships with TFL that ranged from 0.39 to 0.79.

Given these findings, the relationships between TFL, VBS, VCS, and CBS were explored. The correlation matrix

revealed a significant ($p<0.001$), positive, bivariate relationship for each variable pair. These relationships ranged in strength from moderately high for VCS and VBS ($r=0.70$) to high for TFL and VBS ($r=0.93$). Based on the LBQ cluster and factor bivariate relationships with low coefficient alphas for six of the factors, the researcher was forced to eliminate use of the 10 factors in data analysis. The significant cluster relationships between VBS, VCS, CBS, and TFL supported the degree of internal consistency represented by each scale's coefficient alpha. Therefore, the TFL, VBS, VCS, and CBS were accepted as providing reliable measures for the variables of interest in this study and were used in data analysis procedures.

The Leadership Development Inventory (LDI) contains four separate scales: Formal Educational Activities (FED), Formal Content (FCON), Formal Teaching Strategies (FSTRA), and Informal Educational Activities (IED). For this sample of nurse leaders LDI scale reliability was computed using Cronbach's alpha. The achieved coefficient estimates were: 0.86 for FED, 0.98 for FCON, 0.92 for FSTRA, and 0.88 for IED. To further examine the validity of this new instrument a correlation matrix for the LDI scales (FED, FCON, FSTRA, and IED) was created (table 8). Although bivariate relationships in the matrix were both positive and significant, the strength of these correlations were low to moderatedly high and less than the internal consistency

Table 8.--Leadership Development Inventory Scale Correlations (N=66)

	FCON	FSTRA	IED
FED	.45***	.35**	.30*
FCON		.69***	.70***
FSTRA			.72***

*p<0.05; **p<0.01; ***p<0.001

reliabilities for each scale. These findings provide evidence in support of descriminate validity. As each individual LDI scale was significantly, positively related to the remaining three LDI scales, evidence of convergent validity was provided regarding the tool's ability to measure formal and informal educational importance.

Given the necessity of examining new instrument performance under various conditions, coefficients were also calculated based on degree of transformational leadership (TFL). Groups were formed based on TFL scores indicating a high, moderate, or low degree of transformational leadership for group members. Reliability of the LDI for each group and the total sample was then examined (table 9).

When comparing reliability estimates of the LDI according to TFL group with the total sample, coefficients were strikingly similar for three of the four scales. As coefficients for all four scales exceeded the 0.60 minimum established for this study, the LDI was deemed a reliable

Table 9.--LDI Scale Coefficient by Degree of TFL

Scale	TFL Group			
	Total Sample (N=66)	High TFL (N=25)	Moderate TFL (N=29)	Low TFL (N=12)
FED	0.86	0.81	0.79	0.95
FCON	0.98	0.98	0.97	0.98
FSTRA	0.92	0.93	0.90	0.92
IED	0.88	0.87	0.86	0.92

instrument to measure the variables of interest.

Qualitative Analysis

In-depth interviews of nine participants meeting established criteria and nurse leader job descriptions from each urban hospital represented in the study comprised the qualitative data pertinent to this investigation. Data from each of these sources were independently analyzed. Constant comparison of multiple sorting for each data set was conducted to assure trustworthiness of findings. As patterns emerged, tentative categories for the data set were combined based on logical ordering supported by the theoretical concepts underpinning this study. Each category was searched for presence of any possible negative evidence. When no further logical enlarging of categories was possible and negative evidence was absent, the categories were

accepted as true and valid. Categories are presented for the two qualitative data sets. Through methodological triangulation qualitative findings were examined for corroboration of quantitative results.

Findings

Four research questions examined if differences in the amount or importance of formal educational activities, the formal content and teaching strategies associated with these activities, and the informal educational activities experienced by hospital nurse leaders varied according to the presence of a high, moderate, or low degree of transformational leadership. Findings related to nurse leader satisfaction with current position were a secondary focus. Quantitative and qualitative findings related to each research question are presented.

The primary research question of this investigation was concerned with two issues: what degree of transformational leadership do hospital nurse leaders demonstrate and do these hospital nurse leaders perceive differences in the amount or importance of previously experienced formal and informal educational activity based on degree of transformational leadership (TFL) present. Degree of transformational leadership present in this sample of nurse leaders was calculated using scores from the Leadership Behavior Questionnaire (LBQ). In order to interpret TFL

findings data are first presented regarding number of items associated with the total instrument (TFL) and the Visionary Behavior (VBS), Visionary Characteristics (VCS), and Culture Building (CBS) scales of the instrument. Possible and actual score range, mean score, standard deviation, and coefficient alpha for each scale is displayed in table 10.

The total TFL score was used to designate participants as a high, moderate, or low transformational leader. While the total TFL score was the determinant of TFL group assignment, considering the factors which comprise this leadership style was important. Therefore, score ranges for high, moderate, and low amounts of visionary behavior (VBS),

Table 10.--Hospital Nurse Leader Transformational Leadership Scores by TFL Scale (N=66)

Scale	Items	Possible Range	Actual Range	$\bar{X}$	SD	alpha
TFL	50	50-250	156-234	193.82	17.85	0.89
VBS	25	25-125	86-123	102.80	8.84	0.81
VCS	15	15-75	40-71	55.55	7.13	0.69
CBS	10	10-50	29-49	39.76	4.26	0.55

visionary characteristics (VCS), and culture building (CBS) as well as total TFL ranges are listed in table 11.

Particiapants could be classified as having a high,

Table 11.--Possible High, Moderate, and Low Score Range by TFL Scale

Scale	Range High	Moderate	Low
TFL	201-250	176-200	50-175
VBS	102-125	92-101	25-91
VCS	60-75	51-59	15-50
CBS	43-50	37-42	10-36

moderate, or low degree of transformational leadership yet not achieve a comparable score for one of the three TFL subscales. For example, a nurse leader assigned to the moderate TFL group could have a CBS score reflecting a low amount of this transformational factor.

Following computation of TFL, VBS, VCS, and CBS scores, participants were assigned to groups based on their TFL score: group 3 (high TFL), group 2 (moderate TFL), and group 1 (low TFL). Table 12 displays TFL, VBS, VCS, and CBS scores for the total sample and by group membership.

In order to provide meaning to these group scores, data related to group demographics and career characteristics are listed in table 13. In examining the demograhic data several trends emerged regarding TFL group membership. Almost two-thirds (64%) of the participants (N=16) having a high degree of transformational leadership had a

Table 12.--Transformational Leadership Scores by Group Membership

Score	Total (N=66)	Group 3 (N=25)	Group 2 (N=29)	Group 1 (N=12)
TFL				
$\bar{X}$	193.82	211.88	189.17	167.42
SD	17.85	8.76	6.75	6.32
Range	156-234	201-234	176-200	156-175
VBS				
$\bar{X}$	102.80	110.88	100.93	90.50
SD	8.84	4.86	5.41	3.61
Range	86-123	104-123	91-114	86-97
VCS				
$\bar{X}$	55.55	62.16	53.52	46.67
SD	7.13	5.29	3.24	4.03
Range	40-71	49-71	47-60	40-52
CBS				
$\bar{X}$	39.76	43.40	39.10	33.75
SD	4.26	2.69	2.08	3.11
Range	29-49	39-49	34-42	29-39

baccalaureate (nursing or non-nursing) or higher degree while only 41% (N=17) or less of the participants with a moderate or low degree of TFL had achieved this level of education. However, when testing for differences in educational level of transformational groups, no statistical significance (χ^2=3.16, df=2) was found. Even though nurse leaders with high TFL scores had slightly more total leadership experience, no statistically significant

Table 13.--Nurse Leader Demographics and Career Characteristics by TFL Group

Item	Group 3 (N=25)	Group 2 (N=29)	Group 1 (N=12)
Age ($\bar{X}$)	41.84	38.75	42.08
Education*			
ADN	4	3	0
DIP	10	18	8
BSN	11	11	5
BNN	3	0	1
MSN	5	0	0
MNN	1	0	0
Experience in years ($\bar{X}$)			
Nursing	18.4	17.97	20.17
Leadership	10.28	8.66	9.33
Position	4.83	3.45	6.17
Organization factors ($\bar{X}$ amount)			
Hospital bed size	377.80	375.83	355.67
Unit bed size	27.80	23.75	22.27
Employees supervising	37.25	35.45	24.73
RN %	61.13	62.94	58.70

*Note: Participants may give multiple responses

(χ^2=1.39, df=2) differences inleadership experience occurred based on TFL group membership.

A more interesting pattern emerged when comparing organizational data by group membership. As TFL scores increased, three of four organizational descriptors increased in amount. That is, the nurse leaders with high

TFL scores worked in larger hospitals and supervised more employees on larger nursing units that nurse leaders with moderate or low TFL scores.

In order to answer the second component of this research question, the Leadership Development Inventory (LDI) was used to measure importance and amount of previous formal and informal education experienced by the nurse leader participants. Two of the four scales comprising the LDI measured these variables: the Formal Educational Activities scale (FED) and Informal Educational Activities scale (IED). Two additional scales, the Formal Content scale (FCON) and Formal Teaching Strategies scale (FSTRA) measured activities associated with formal education. The FCON scale measured importance and amount of content experienced by nurse leaders during previous formal education. The importance and amount of teaching strategies was measured by the FSTRA scale. Data pertaining to number of items, possible and actual score range, mean score, standard deviation, and coefficient alpha for the FED, IED, FCON, and FSTRA scales are provided in table 14.

Importance of Educational Activities

Theoretically, an importance score of zero was possible for any of the four LDI scales. Though FED, IED, FCON, and FSTRA scales have 18 to 65 items, participants only responded to those items which represent an educational

Table 14.--Hospital Nurse Leader Formal (FED) and Informal (IED) Educational Activities Importance Scores (N=66)

Scale	Items	Possible Range	Actual Range	$\bar{X}$	SD	Alpha
FED	18	0-90	4-78	25.23	17.46	0.86
IED	25	0-125	12-109	54.49	22.21	0.88
FCON	65	0-325	10-311	128.36	83.06	0.98
FSTRA	28	0-140	8-129	65.85	28.57	0.92

activity actually experienced by them. Items for the FED, IED, and FCON scales were rated according to degree of importance with very important (5) being the highest and no importance (1) being the lowest possible rating. Items for the FSTRA scale were rated based on effectiveness of the teaching strategy for formal educational activities. Items on the FSTRA scale were rated from very effective (5) to not effective (1). A zero score was assigned to items on each scale not experienced by the nurse leader. All participants identified formal educational activities and formal teaching strategies as having some degree of importance in their leadership development.

To further explore the impact of educational activities on development of transformational leadership, FED, IED, FCON, and FSTRA scores were sorted according to TFL group (table 15). Evaluation of these data revealed mean scores

Table 15.--FED, IED, FCON, and FSTRA Importance Scores by TFL Group

Scale	Total (N=66)	Group 3 (N=25)	Group 2 (N=29)	Group 1 (N=12)
FED				
$\bar{X}$	25.23	28.00	21.83	28.50
SD	17.46	16.10	13.94	25.70
Range	4-78	5-72	8-78	4-72
Alpha	0.86	0.81	0.79	0.95
IED				
$\bar{X}$	54.49	60.96	55.24	39.17
SD	22.21	23.10	19.63	20.42
Range	0-109	0-109	17-88	12-72
Alpha	0.88	0.87	0.86	0.87
FCON				
$\bar{X}$	128.36	154.40	119.38	95.83
SD	83.06	95.00	69.02	77.75
Range	0-311	0-311	20-245	12-254
Alpha	0.98	0.98	0.97	0.98
FSTRA				
$\bar{X}$	65.85	73.16	64.90	52.92
SD	28.57	31.50	25.14	27.29
Range	0-129	0-129	22-112	8-115
Alpha	0.92	0.93	0.90	0.92

on three of the importance scales were higher for participants in group 3 (high TFL scores) than for those participants having moderate or low TFL scores.

Amount of Educational Activity

To fully explore the relationship between educational activities and transformational leadership, the amount of educational activity experienced by nurse leaders as well as the reported importance of those activities was examined.

The amount of formal educational activity (AFED), informal educational activity (AIED), formal content (AFCON), and formal teaching strategies (AFSTRA) experienced was computed by a simple tally of number of items nurse leaders indicated they had previously experienced. The amount including mean, standard deviation, and range for each scale by TFL group is displayed in table 16.

Table 16.--Amount of FED, IED, FCON, and FSTRA by TFL Group

Scale	Total (N=66)	Group 3 (N=25)	Group 2 (N=29)	Group 1 (N=12)
AFED				
$\bar{X}$	2.71	3.56	2.27	2.33
SD	2.84	2.62	1.92	4.58
Range	0-13	0-9	0-8	0-13
AIED				
$\bar{X}$	4.89	6.76	4.38	2.25
SD	3.85	3.57	3.79	2.60
Range	0-13	0-12	0-13	0-9
AFCON				
$\bar{X}$	12.29	20.84	8.82	8.33
SD	14.24	17.84	9.26	8.69
Range	0-58	0-58	0-30	0-28
AFSTRA				
$\bar{X}$	5.56	7.84	4.14	4.25
SD	4.95	6.07	3.35	4.09
Range	0-21	0-21	0-11	0-14

Participants having a high degree of transformational leadership participated in more formal and informal

educational activities, and experienced a larger range of content and teaching strategies than did those participants with a lesser degree of transformational leadership. This trend of higher scores for nurse leaders with a high degre of transformational leadership was present for the educational importance scores (table 15) as well as for the amount scores (table 16).

Differences in Educational Activities

To determine if the importance or amount of FED, IED, FCON, or FSTRA differed based on TFL group membership, an analysis of variance (ANOVA) was computed. As the factors of leadership experience and highest level of academic achievement were of particular interest to the researcher, these variables were included in the ANOVA. Thus, a 3 x 2 x 2 factorial design was created. The three TFL groups comprised one factor.

The second factor, amount of leadership experience, has been described in the literature as a factor influencing behavior of the leader. For this sample, 4.48 years was the mean amount of current leadership position experience. Based on this finding, a criteria of five years was used in determining participant leadership group membership. Therefore, participants were assigned to one of two leadership experience groups (leaders with 5 or less years of leadership experience and leaders with more than five

years leadership experience).

The third factor in this design was based on highest level nursing program completed by participants. In 1965 the American Nurses Association recommended the baccalaureate degree in nursing as the minimum criterion for designation as a professional nurse. The diploma and associate degree nursing education programs are designed to produce a "bedside" nurse who provides assistance to the professional nurse. As a result of this recommendation and current trends in registered nurse preparation, participants were assigned to one of two groups based on highest level nursing program completed (Baccalaureate or higher degree group and only a diploma or associate nursing degree group).

Differences in Educational Activity Importance

Analysis of variance procedures were used to examine the importance of informal educational activities and formal educational content, and the effectiveness of formal teaching strategies by degree of transformational leadership (TFL), type of nursing program (TPN), and leadership experience (LEXP) creating a 3 x 2 x 2 factorial model.

Findings related to informal education (table 17) indicated that differences can be explained according to the degree of transformational leadership present. Mean scores (table 18) suggest nurse leaders with a low degree of TFL perceived informal education to be only two-thirds as

important as those with a high degree of TFL.

Based on these findings, the null hypothesis that no differences in importance of informal education occurs as a result of low, moderate, or high transformational leadership was rejected. That is, importance of informal education as a contributor to leadership development for this sample of nurse leaders was different based on degree of transformational leadership present. Post hoc testing (Scheffe procedure) revealed the informal education scores of nurse leaders in the high transformational group were significantly ($p<0.05$) more important than the low

Table 17.--Analysis of Variance for Importance of Informal Education by Transformational leadership (TFL), Type Nursing Program (TNP) and Leadership Experience (LEXP) (N=66)

Source of Variance	SS	df	MS	F	p
Between groups					
TFL	2497.926	2	1248.963	3.532	0.036*
TNP	696.951	1	696.951	1.971	0.166
LEXP	4366.025	1	4366.025	12.348	0.001***
TFL X TNP	517.368	2	258.684	.732	0.486
TFL X LEXP	1320.943	2	660.472	1.868	0.164
TNP X LEXP	1403.931	1	1403.931	3.970	0.051
TFL X TNP X LEXP	1224.306	2	612.153	1.731	0.187
Within groups	19093.970	54	353.592		
Total	32060.485	65	493.238		

*p<0.05; ***p<0.001

Table 18.--Mean Informal Education Importance Score by Transformational Leadership (TFL), Type Nursing Program (TNP), and Leadership Experience (LEXP) (N=66)

Factor	Group Score		
TFL	High	Moderate	Low
$\bar{X}$	60.96	55.24	39.17
SD	23.10	19.63	20.24
TNP	BS or higher	ADN or Diploma	
$\bar{X}$	58.45	50.52	
SD	20.31	23.59	
LEXP	More than 5 yr.	5 yrs. or less	
$\bar{X}$	60.09	40.63	
SD	18.87	24.22	

transformational leaders. No differences were found between the moderate and low transformational leader groups. The results also indicated differences in informal education importance occurred according to amount of leadership experience. Furthermore, the significant ($p=0.051$) interaction between type nursing program and leadership experience created additional importance for informal education. That is, when nurse leaders were more experienced and had obtained at least a baccalaureate degree, they assigned more importance to informal educational experiences.

The formal content findings (table 19) revealed that only amount of nurse leadership experience contributed to differences in percieved importance of this variable. Based

Table 19.--Analysis of Variance for Importance of Formal Educational Content by Transformational Leadership (TFL), Type Nursing Program (TNP), and Leadership Experience (LEXP) (N=66)

Source of Variance	SS	df	MS	F	p
Between groups					
TFL	18545.628	2	9272.814	1.690	0.194
TNP	12144.958	1	12144.958	2.214	0.143
LEXP	81043.802	1	81043.802	14.773	0.000***
TFL X TNP	5694.244	2	2847.122	.519	0.598
TFL X LEXP	2945.231	2	1472.615	.268	0.766
TNP X LEXP	1017.599	1	1017.599	.185	0.668
TFL X TNP X LEXP	16766.921	2	8383.461	1.528	0.226
Within groups	296247.394	54	86.063		
Total	448465.273	65	6899.466		

***p<0.001

Table 20.--Mean Formal Content Importance Score by Transformational Leadership (TFL), Type Nursing Program (TNP), and Leadership Experience (LEXP) (N=66)

Factor	Group Score		
TFL	High	Moderate	Low
$\bar{X}$	154.40	119.38	95.83
SD	95.00	69.02	77.75
TNP	BS or higher	ADN or Diploma	
$\bar{X}$	144.76	111.97	
SD	90.77	72.24	
LEXP	More than 5 yr.	5 yrs. or less	
$\bar{X}$	151.04	72.26	
SD	74.73	77.31	

on these data, the null hypothesis that no difference in formal teaching content can be explained by degree of TFL was accepted. Neither degree of transformational leadership or highest level of nursing education achieved was a predictor of formal content importance. Yet, the mean formal content score (table 20), as measure of variable importance, for nurse leaders with more than five years of experience was twice the mean importance score for those with less experience achieving a 0.001 level of significance.

Variation in the importance of formal teaching strategies was explained by amount of nurse leadership experience (table 21). Nursing program type also contributed to differences in importance of formal teaching strategies. Differences in importance of formal teaching strategies was not explained by degree of transformational leadership. Therefore, the null hypothesis that no difference in formal teaching strategy importance can be explained by degree of transformational leadership was accepted. However, almost two-thirds (n=40) of the total sample reported over five years of leadership experience with either a moderate or high degree of transformational leadership. In addition examination of the mean importance scores (table 22) for formal teaching strategies revealed that the inexperienced leaders perceived formal strategies as being less important to leadership development than did

Table 21.--Analysis of Variance for Importance of Formal Teaching Strategies by Transformational Leadership (TFL), Type Nursing Program (TNP), and Leadership Experience (LEXP) (N=66)

Source of Variance	SS	df	MS	F	p
Between groups					
TFL	1623.176	2	811.588	1.135	0.329
TNP	4439.400	1	4439.400	6.207	0.016*
LEXP	3042.918	1	3042.918	4.254	0.044*
TFL X TNP	743.128	2	371.564	.519	0.598
TFL X LEXP	298.989	2	149.494	.209	0.812
TNP X LEXP	1126.636	1	1126.636	1.575	0.215
TFL X TNP X LEXP	989.896	2	494.948	.692	0.505
Within groups	38623.927	54	715.258		
Total	53064.485	65	816.377		

*p<0.05

Table 22.--Mean Formal Strategy Importance Score by Transformational Leadership (TFL), Type Nursing Program (TNP), and Leadership Experience (LEXP) (N=66)

Factor	Group Score		
TFL	High	Moderate	Low
$\bar{X}$	73.16	64.90	52.92
SD	31.50	25.14	27.29
TNP	BS or higher	ADN or Diploma	
$\bar{X}$	74.85	56.85	
SD	26.85	27.75	
LEXP	More than 5 yr.	5 yrs. or less	
$\bar{X}$	70.36	54.68	
SD	25.78	32.62	

more experienced leaders.

Differences in Amount of Educational Activities

Findings related to the amount of informal education (tables 23 and 24) indicated that significant differences occurred when degree of transformational leadership varied, thereby, allowing rejection of the null hypothesis. That is, for this sample of nurse leaders, the amount of reported participation in informal activities varied according to degree of transformational leadership present. The high transformational nurse leader group had significantly ($p<0.05$) higher amounts of informal education than the nurse leaders with a low degree of transformational leadership based on the Scheffe test post hoc procedure. No other between group differences in amount of informal education were found.

The amount of formal content (table 25) was also varied significantly based on degree of transformational leadership. Post hoc testing using the Scheffe procedure revealed the high transformational nurse leader group had a significantly ($p<0.05$) higher amount of formal content than the moderate or low transformational groups. The amount of formal content experienced by the moderate and low groups was not significantly different. These findings supported rejection of the null hypothesis that differences in formal teaching content were explained by degree of

Table 23.--Analysis of Variance for Amount of Informal Education by Transformational Leadership (TFL), Type Nursing Program (TNP), and Leadership Experience (LEXP) (N=66)

Source of Variance	SS	df	MS	F	p
Between groups					
TFL	148.726	2	74.013	5.964	0.005**
TNP	11.608	1	11.608	.935	0.338
LEXP	10.286	1	10.286	.829	0.367
TFL X TNP	37.668	2	18.834	1.518	0.228
TFL X LEXP	34.760	2	17.335	1.397	0.256
TNP X LEXP	34.261	1	34.261	2.761	0.102
TFL X TNP X LEXP	4.404	2	2.202	.177	0.838
Within groups	670.079	54	12.409		
Total	962.258	65	14.804		

**p<0.01

Table 24.--Mean Informal Education Amount Score by Transformational Leadership (TFL), Type Nursing Program (TNP), and Leadership Experience (LEXP) (N=66)

Factor	Group Score		
TFL	High	Moderate	Low
$\bar{X}$	6.76	4.38	2.25
SD	3.57	3.79	2.60
TNP	BS or higher	ADN or Diploma	
$\bar{X}$	5.61	4.18	
SD	4.05	3.54	
LEXP	More than 5 yr.	5 yrs. or less	
$\bar{X}$	5.21	4.11	
SD	3.74	4.09	

Table 25.--Analysis of Variance for Amount of Formal Content by Transformational Leadership (TFL), Type Nursing Program (TNP), and Leadership Experience (LEXP) (N=66)

Source of Variance	SS	df	MS	F	p
Between groups					
TFL	1969.251	2	984.626	5.400	0.007**
TNP	90.303	1	90.303	.495	0.485
LEXP	632.043	1	632.043	3.467	0.068
TFL X TNP	72.742	2	28.972	.159	0.853
TFL X LEXP	4.420	2	2.210	.012	0.988
TNP X LEXP	1.352	1	1.352	.007	0.932
TFL X TNP X LEXP	250.456	2	125.228	.687	0.508
Within groups	9845.508	54	182.324		
Total	13171.530	65	202.639		

**p<0.01

Table 26.--Mean Formal Content Amount Score by Transformational Leadership (TFL), Type Nursing Program (TNP), and Leadership Experience (LEXP) (N=66)

Factor	Group Score		
TFL	High	Moderate	Low
$\bar{X}$	20.84	8.82	8.33
SD	17.84	9.26	8.69
TNP	BS or higher	ADN or Diploma	
$\bar{X}$	15.60	10.97	
SD	15.76	12.32	
LEXP	More than 5 yr.	5 yrs. or less	
$\bar{X}$	15.28	8.37	
SD	14.34	13.02	

transformational leadership. However, neither type of nursing program or amount of leadership experience contributed to variance in amount of formal content experienced by this sample.

That the amount of formal content mean scores for leaders with over five years of experience was almost twice the mean score of leaders with lesser leadership experience (table 26) was noteworthy. However, a large variation in formal content scores within each group occurred creating a large error term. This development contributed to the absence of statistically significant differences in the two leadership groups.

Significant differences in formal teaching strategies (table 27) also occured when degree of transformational leadership varied. Mean formal strategy amount scores (table 28) for participants with a high degree of transformational leadership were higher than those with a lesser degree of transformational leadership. Post hoc testing indicated that differences in amount of formal teachng strategies were significant ($p<0.05$) only when comparing high and moderate transformational groups. These findings resulted in rejection of the null hypothesis that variance in transformational leadership accounted for no differences in amount of formal teaching strategies experience by study subjects.

However, mean scores for participants with at least

Table 27.--Analysis of Variance for Amount of Formal Teaching Strategies by Transformational Leadership (TFL), Type Nursing Program (TNP), and Leadership Experience (LEXP) (N=66)

Source of Variance	SS	df	MS	F	p
Between groups					
TFL	176.772	2	88.386	3.934	0.025*
TNP	13.772	1	13.772	.613	0.437
LEXP	.193	1	.193	.009	0.926
TFL X TNP	6.567	2	3.284	.146	0.864
TFL X LEXP	106.460	2	53.2230	2.369	0.103
TNP X LEXP	2.464	1	2.464	.110	0.742
TFL X TNP X LEXP	25.222	2	12.611	.561	0.574
Within groups	1213.286	54	22.468		
Total	1592.258	65	24.496		

*p<0.05

Table 28.--Mean Formal Strategy Amount Score by Transformational Leadership (TFL), Type Nursing Program (TNP), and Leadership Experience (LEXP) (N=66)

Factor	Group Score		
TFL	High	Moderate	Low
$\bar{X}$	7.84	4.14	4.25
SD	6.07	3.35	4.09
TNP	BS or higher	ADN or Diploma	
$\bar{X}$	6.39	4.73	
SD	5.26	4.54	
LEXP	More than 5 yr.	5 yrs. or less	
$\bar{X}$	5.60	5.47	
SD	4.28	6.44	

a baccalaureate degree and more than five years of leadership experience were higher when compared to those with less than a baccalaureate degree and five years or less of experience. Yet, no significant variance in amount of formal teaching strategy was accounted for based on type of nursing program or leadership experience.

No differences in amount of educational activity were explained by amount of leadership experience or type of nursing program. That is, in this sample of 66 nurse leaders differences in the amount of informal education, formal content, and formal teaching strategies varied based on having a high, moderate, or low degree of transformational leadership. As there was no significant interaction between transformational leadership, amount of leadership experience, and type of nursing program, the variation in amount of informal educational, formal content, and formal teaching strategies was not likely to have been compounded by chance. Though not statistically significant, it was important to note that those nurse leaders with five or more years of experience also achieved a higher level of academic credentials. They participated in larger amounts of formal education than did less experienced nurse leaders. Almost one-half (47.4%) of the inexperienced nurse leaders (N=9) did not have a baccalaureate degree and participated in smaller amounts of formal education.

Educational Activity and Transformational Leadership

In order to further understand the influence of formal and informal education importance in the development of transformational leadership by hospital nurse leaders, a correlation matrix including the variables of transformational leadership (TFL), visionary behavior (VBS), visionary characteristics (VCS), culture building (CBS), formal education (FED), and informal education (IED) was created (table 29).

Table 29.--Relationship of Formal(FED) and Informal (IED) Education with Transformational Leadership (TFL), Visionary Behavior (VBS), Visionary Characteristics (VCS), and Visionary Culture Building (CBS) (N=66)

	FED	IED
TFL	.149	.343**
VBS	.203	.281*
VCS	.189	.348**
CBS	.119	.318**

*p<0.05; **p<0.01

Only the IED variable was significantly correlated to transformational variables (TFL, VBS, VCS, and CBS). Though the IED relationships were limited in strength, they were highly significant while the nonsignificant FED relationships exhibited almost no strength.

To further examine the relationship between formal and informal education with other study variables, leader and organizational characteristics were added to the correlation matrix. Amount of leadership experience (LEXP) and highest level of nursing program (TPN) completed were added as leader characteristics. The organizational variables included were: number of hospital beds, number of employees supervising, and percentage of registered nurse workers in the nursing organization. Since, these additions to the formal and informal education matrix resulted in only one new significant correlation, IED and LEXP ($r=0.30$, $p<0.05$), the actual matrix is not presented.

These findings regarding IED's significant relationship to TFL provided additional support for the ANOVA results discussed earlier. In addition, the amount of informal education (AIED) had a moderate, highly significant relationship with the importance of informal education (table 30). AIED was also highly significant in its positive relationship with the importance of formal content and formal strategies. The amount of formal education (AFED) was significantly related to FED and FCON importance. No significant relationship occurred between amount of FED and importance of IED. However, the amount of FCON and FSTRA demonstrated significance in their respective relationships with importance of FED, IED, FCON, and FSTRA.

Table 30.--Relationship of Educational Importance Score with Amount of Education Score (N=66)

	FED	IED	FCON	FSTRA
AFED	.667**	.215	.348**	.184
AIED	.151	.618***	.443***	.420***
AFCON	.392***	.540***	.779***	.518***
AFSTRA	.289*	.407***	.510***	.683***

*p<0.05; **p<0.01; ***p<0.001

Educational Activities Importance Rankings

Quantitative findings strongly indicated that greater amounts of informal education with the assignment of more importance to these activities were typical of nurse leaders demonstrating a high degree of transformational leadership. Further analysis revealed that the importance and amount of informal education were related to the importance of formal education and the amount and importance of formal content and formal teaching strategies. In an attempt to more clearly understand the meaning of these results, findings related to participant rankings of educational activities importance follow.

Rankings by nurse leaders identified the five formal and informal educational activities that contributed the most to their development as a leader. The five activities from each category were ranked in order of importance from

"Most Important" to "Fifth Most Important". Table 31 displays the frequency data regarding the formal and informal items identified as having the most important contribution to leadership development. Data are reported in rank order according to percentage of particpants identifying the item as important.

Table 31.--Formal and Informal Educational Activities Ranked as Most Important

Formal Activity (N=53)	%	Informal Activity (N=56)	%
1. Item not on LDI	21.2	1. On the job training	42.4
2. Continuing education by professional organization	12.1	2. Item not on LDI	10.6
3. Continuing education by employing agency	9.1	3. Mentorship	9.1
3. Undergraduate course with leadership content	9.1	3. Previous supervisor as role model	9.1
4. Specific graduate nursing course in leadership	7.6	4. Current supervisor as role model	3.0
5. Diploma course with leadership content	4.5	4. Implemented planned unit change	3.0
		4. Officer for professional organization	3.0

Responses indicated more participant agreement regarding the importance of informal activities than formal activities. While 42% of the leaders who provided informal rankings clearly identified on the job training (OJT) as having the most important educational influence on their leadership development, there was much disparity in terminology used for the most important formal educational activity. Response examples included: "undergraduate course, human resources, graduate program, nursing school, management by development, graduate school leadership course, course in leadership, personnel management, undergraduatenursing, organizational psychology and behavior, management seminar, and management workshop." These responses, though not matched with a specific questionnaire item, indicated the most important formal education activity for 21% of the leaders who ranked this category was a specific academic or continuing education activity having leadership content. It was not possible to differentiate responses absolutely as a continuing education experience or a college/university course. However, logical interpretation of these items suggested formal course work was more frequently selected as the most important formal activity.

In order to gain further clarity about the most important formal and informal educational activity, nurse leaders descriptions of those factors contributing to the

selection of an item as most important were also analyzed. Following multiple sorting of responses for the most important formal educational activity, five factors emerged as influencing item selection: content, process, design, instructor, and participants. Comments related to each factor are listed in table 32.

Table 32.--Factors Contributing to Selection of Most Important Formal Education Activity Ranked According to Frequency (N=37)

Factor	Comment
Content (N=28)	Conflict resolution, team building, budget, decision making, problem employees, leader style, management theory, quality management, confrontation, time management, politics, job satisfaction, directing, delegating, feedback, change theory, communication, and recruitment/ retention
Process (N=20)	Leadership practicum, group work, observe a role model, networking, group project/presentation, discussion, application, role playing, supportive network for solving "real life" issues, trainer training, provided handouts, specific to hospital
Instructor (N=6)	Qualifications, experience, facilitator style, business leaders, innovative ideas, professional trainers from all over the country, doctoral candidate
Participants (N=4)	Varying amounts of experience, from different settings, other hospital leaders, nurse leaders/managers
Design (N=2)	Ongoing, 3-day workshop

The content presented and the process used to facilitate content mastery were most frequently identified as contributing to the selection of a formal educational activity as most important. More than 60% of participants responding to this item indicated that both content and process were a major factor in determining the activity's importance.

Data related to factors contributing to the selection of the most important informal educational activity are presented in table 33. Analysis of comments indicated that while process and content factors were the predominant contributors to selection of the most important informal educational activity, process was the factor used most frequently to rate the importance of informal education. The comments describing process revealed that nurse leaders perceived that self-paced learning in a supportive environment was the cornerstone to informal education as a contributor to leadership development. Having expectations clearly communicated with frequent provision of feedback was described as a critical process for informal education. Supportive behavior of the informal teacher became apparent as a critical factor in facilitating the development of nurse leaders through informal education activities.

Knowledge of the most important formal and informal educational activities that contribute to nurse leader development provided essential data concerning these two

Table 33.--Factors Contributing to Selection of Most Important Informal Educational Activity Ranked According to Frequency (N=37)

Factor	Comment
Process (N=37)	Crisis management, formal projects, role model, self-learning, trial and error, consistent feedback, networking, stress reducing, self-paced, autonomy, clear expectations, assistance available, creativity fostered, freedom to learn and make mistakes, support, recognition, knowledge/ability affirmed, risk taking, reality based
Content (N=25)	Problem solving, personnel relations, job scope, priority setting, goal setting, horizontall and vertical communication, administrative procedures, participative management, situational leadership, organization politics, systematic assessment
Instructor (N=13)	Role model, helpful, respect, mentor, "can relate to," supportive, fair, positive attitude, qualifications, empowers others, contributes to organization, "helped people reach highest level of potential"
Design (N=10)	Unstructured, facilitated self-discovery, consistent feedback, learn as situation develops

categories. However, it was also essential to examine the relative importance of educational activities experienced regardless of formal or informal classification. Participant importance rankings for all educational activities (the five formal and five informal activities forming one group of ten) were therefore examined. Frequency data regarding the

item identified as the educational activity providing the most important contribution to leadership development are included in table 34.

Table 34.--Educational Activities Ranked as Most Important (N=51)

Activity	Frequency
1. On the job training	17
2. Informal activity not listed on LDI	11
3. Mentorship	3
3. Continuing education by professional organization	3
3. Specific graduate nursing course in leadership	3

Analysis of these data indicated that informal activities were more frequently rated as the most important educational contributor to leadership development. Evaluation of frequency rankings for the second to sixth most important educational activity, suggested either on the job training or mentorship as the second or third item on these rankings. Analysis of these importance rankings strengthened the findings regarding the relationships and variances reported for informal and formal education variables.

Quantitative Summary

Results from these quantitative findings substantiate that differences in amount of informal education, formal content, and teaching strategies varied based on degree of transformational leadership. Differences in importance of informal education also were explained by the predictor variable of transformational leadership. In addition, amount and importance of informal education positively correlated with importance of formal education, formal content, and formal teaching strategies and the amount of formal content and formal teaching strategies. These variable also related to transformational leadership.

The activity ranked as most important educational contributor to leadership development by this sample was on the job training. However, mentorship, current supervisor as a positive role model, previous supervisor as postive role model, and informal networking were terms used by these nurse leaders to explain their definition of on the job training. The adult learning concepts of focusing on work related problems in a group discussion interspersed with meaningful content provided by a knowledgeable teacher who communicates valuing of the adult learner emerged as the major theme for all three groups.

In-depth Interviews

In attempting to determine if previous formal and informal educational experiences contributed to the development of transformational leadership, in-depth interviews of nine nurse leaders were analyzed. The focus of these interviews was to clarify factors used by nurse leaders to select an activity as the most important in their leadership development. The emergent themes resulting from the processes of sorting, constant comparison, and searching for negative evidence are presented.

Two themes consistently occurred in the nine interviews: influence of adult learning principles in activity importance and influence of transformational leadership factors in job satisfaction. Data regarding these themes are described based on participant classification as a typical case, extreme case, or critical case.

Two participants having extremely high transformational (TFL) scores and two participants having extremely low TFL scores comprised the extreme case group. The nurse leader having the highest TFL score and the one with the lowest TFL score were included in this group. The critical case group included two dissatisfied nurse leaders, one with a high TFL score and one with a low TFL score. Two nurse leaders with moderate TFL scores, one who indicated being very satisfied and one being dissatisfied, met the criteria for designation

as the typical case group. Due to the researcher interest in examining the specific educational factors that may contribute to the development of transformational leadership, an additional participant with high TFL scores was included creating a total purposeful sample of nine.

Each nurse leader selected agreed to the interview. Interviews were conducted in a private office at the work place of the nurse leader. Time for interviews ranged from 45 to 75 minutes. Each interview was tape recorded to facilitate focusing on the nurse leader and the interview process rather than data collection. Interview data were analyzed prior to quantitative data analysis in an effort to control for any interpretative bias. Findings from these interviews are described by extreme case, critical case, and typical case group according to influence of adult learning concepts on activity importance and transformational language used when describing job satisfaction.

Extreme Case Group

The TFL scores for the nurse leaders in this group indicated that two leaders rated themselves as having a high degree of transformational leadership while a low degree of transformational leadership was reported by two nurse leaders. Findings that suggested differences and similarities in these two extreme groups are described.

Extreme case: high TFL scores

The two nurse leaders having the highest TFL score (234 and 218) were both employed in a community hospital. One graduated from a diploma nursing program and had over twenty years of leadership experience in her current position; the other had a baccalaureate degree in nursing and two years of current position experience. Both leaders were very satisfied with their jobs. In analyzing these two sets of interview data, an attitude of positivism consistently emerged whether the topic focused on educational activities; clarifying perceptions of learning experiences; or beliefs about the influence of the current organization, self, staff, or other leaders in their leadership development. The influence of leadership experience as a "teacher" or contributor to their development as a leader prevailed as a consistent theme in both interviews.

These nurse leaders reporting the highest degree of transformational leadership identified specific adult learning concepts and principles as having a major influence in their selection of a formal and informal educational activity as being the most important. Adult learning concepts described were: "activity 'geared' to current work issues, motivated instructor who created an environment which facilitated group discussion, and group problem solving based on sharing of previous experiences."

The most important previous formal educational activity

for these participants was a continuing education program sponsored by the hospital using faculty from a community college and a graduate course in management. Comments reflecting the identified adult learning themes from the continuing education experience were:

> . . . more geared to the hospital setting - the things you have to do, it gave us information geared to us; the person from the college - he would talk a little bit - try to get responses, it was a little bit of lecture but a lot of situations and how situations worked; participants in the program - could relate to each other's problems . . . it was what went on in the group discussion, that was what made it so good.

Comments representing adult learning principles associated with the graduate course were similar:

> Everything I learned related to the nurse managers and I would think, oh, I can apply this. He (instructor) appeared to have such a broad background. He could really facilitate group discussion. You could really share a lot of our experiences. And I realized a lot of the situations managers come into in any situation are typical across the board. I like a chance to talk about it. That's how I learn.

Comments regarding a definition for on the job training, identified by both nurse leaders as the most important informal educational activity included:

> What I meant was trial and error. I guess I mean experience is your best teacher... You start on the job and you learn the best way that works and then you go on to something else, structure and logical progression of information, practical application plus sequenced presentation of the daily operations information needed.

During the interview an attempt was made to ascertain if the nurse leader believed formal or informal education was more important to the process of leadership development.

The following excerpts were these participants response when asked, "which is more important to you, the formal education experience (continuing education or graduate course) or OJT?"

> **Response A.** Well, they're really two different things, two different processes. And you've got to have a certain amount of knowledge to start with - to do it. You might not have a lot of experience but you've got to have the knowledge first. And then you've got to get the experience and the only way to get it is with OJT. And I've learned probably better that way - and I learned that way. I can probably learn something the other way (knowledge with no OJT) but it doesn't show its importance unless you put it to use. You have to go through trial and error without knowledge - here you might kill somebody. So you've got to have some basic knowledge I think. But you've sort of developed all along. But you still need the basic education. It tells you how to get what you want.

> **Response B.** That's hard. It's hard because ideally I would say put them all together at one. Because you really can't have one without the other. OJT is concerned with institution specifics, the daily specifics, protocols, procedures, just the specifics of daily functioning. And a graduate management class is different in that it is so universal in understanding. I guess I would say put the two together. And I think in order to prepare a new manager, its not going to be one day in a class with a little bit of this or that. It's a bigger endeavor. Problem solving, that's the key. Learning to problem solve.

Following these responses, the participants clearly articulated that both processes were essential. They both elaborated on a need for a formal management course provided for all new leaders. Both stressed using past experience to solve problems and the problem solving becoming easier as experience increased. Mentorship, as an informal educational activity, was cited as an adjunct to OJT by both

participants. According to these nurse leaders mentorship was ". . . having another person that did the job well and you took from what they did and tried to get experience -- they did that and it worked -- maybe I'll try it that way." A mentor was defined as, "A good communicator. Someone who's very good at assessing, someone who can advise but can step back and give you all the room in the world to try out things you want to. The mentor helps interpret and share experience." The mentor's role was articulated by one leader as helping develop deficient skills that occur as a result of registered nurse preparation through a diploma school of nursing. Skills developed as a result of mentorship included writing proposals, presenting programs, and an basic understand of how to use statistics to support proposals and justify staffing needs. She described utilizing this knowledge and assistance from the mentor to change her own behavior and solve problems. She elaborated with the following response:

> Today you've got to stay real cool or it degrades you. You've got to stay level headed and just put it in an objective type manner so they (administration) can see it, cause they won't see it any other way. They don't hear "Oh, my patients are so sick!" They don't hear it. And they don't hear, "I didn't get my work done because I'm so busy (patient care)." They don't hear that anymore. When you're a manager you have to put it that way (objective -- statistics) for them or you don't manage right.

During the interview phase focusing on leader satisfaction, multiple transformational leadership factors

emerged as major contributors to the high degree of satisfaction these nurse leaders experienced. Transformational leadership language used by these transformational leaders during the interview included:

> Always positive, honest with them (staff), you're always fair, you can't tell people that they need to do, open minded, can't have a lot of tunnel vision, self-assurance, security, confidence in yourself, becomes a trend setter, assertiveness and delegation, need self-awareness, helping each employee maximize their potential, encourage them (staff) to think for themselves, to go out and take some power and be powerful (staff), they (staff) need to act and not be passive, timely and consistent feedback, constantly adjust my style, and people taking ownership of their practice (work).

These comments were associated with the nurse leaders' discussion of job satisfiers and factors used to measure their own leadership effectiveness. Some terms reflected their recounting of staff descriptions of themselves while the majority were beliefs regarding how they maintained their own job satisfaction and staff satisfaction with the leader and their work environment. The following excerpts provide insight into the degree that transformational leadership traits were inculcated into their total leadership style. Excerpts are categorized according to TFL trait represented.

Visionary Behavior Examples

1. I think experience helps you in the position but its not everything. You can do the same thing, the same way forever. You've got to be open-minded. If someone has an idea, I say , let's try it.
2. You've got to assert yourself so he (Administrator) knows you know what you're talking about. If you can explain it to me (the administrator), you can have it,

but if you can't, you're not going to get it.
3. You don't degrade them (staff). You're always positive with them, honest with them, upfront with them. "The one thing about you, you're always fair."

Visionary Characteristics Examples

1. You've got to have self assurance and security. If you're insecure, you're not going to try new things, anyone else's idea, because you don't want them to be better than you. I use to be that way too. I've learned over the years to have confidence.
2. Rather than saying, what do you think about this and this and this, need to learn to think about it yourself -- need self-awareness. Sometimes its good to have other people but sometimes don't have anybody but yourself.
3. I believe in helping each employee maximize their potential.
4. There are situations that require me to change my style.
5. Constant feedback would help. I can then constantly adjust my style. And I think to myself does this warrant me to change my style or should I chalk this up to nothing.
6. When I see people (staff) taking ownership of their practice and setting an objective for themselves. This is what I'm working towards to be more efficient, to be something better. And making the effort to reach that goal while you're constantly pushing them (staff) along. I love to see people (staff) take responsibility.
7. So probably in the future the biggest change, an almost subtle change, would be the people (staff) themselves and how they relate to each other. Yeah, work on the team work. That would be my goal.

Visionary Culture Building Example

1. I really encourage them (staff) to think for themselves -- encouraging people to say, here are the results in my area -- am I satisfied with them? Here's a problem -- am I satisfied with -- is the outcome appropriate. If it isn't, don't stop there and complain about it. Go out, take some power, be powerful. Negotiate with someone else in another department. Talk this through. I really encourage them to think for themselves.

These nurses with the highest TFL scores clearly integrated concepts of transformational leadership into their leadership style and belief system. It was also important to note the emphasis that their leadership style had evolved to this stage because:

> I've learned to do things this way and I've been encouraged to think for myself during this learning process. There are not always pat answers. You can't always open up a book and say, oh, answer B will work in this situation. I've really been encouraged to think for myself. That's what I had to do.

In regard to beliefs concerning the development of hospital nurses as leaders, responses to the question, "Do you think people can be taught to be leaders?" were:

> **Response A.** Yes, but it might take a long time. Not everyone has the personality. But maybe if they wanted to do this they'd have the personality. There are a lot of people who want to be a nurse but not a leader. They might be a good nurse but not a good leader. Not every one can be a leader.
>
> **Response B.** Yes. But it needs to be taught by nurses. It (the teaching) has to be all encompassing. It has to be proactive. You don't need to teach after the problem comes up. Let's prepare for what might come instead of "let's deal with it now".

These responses of the two nurse leaders with the highest TFL scores indicated a belief that leadership can be taught to nurses. However, the leader with the highest score emphasized that not everyone can be taught while the other high scoring leader focused on the need to prepare nurses as proactive rather than reactive leaders.

Extreme case group: low TFL scores

The two nurse leaders having the lowest transformational scores (156 & 165) were also employed in community hospitals, had either a baccalaureate degree in nursing or a nursing diploma, four to five years of leadership experience, and were dissatisfied with their current position. Neither leader responded to the questionnaire satisfaction item but freely revealed their dissatisfaction on interview. Throughout both of these interviews, there was an undercurrent of hesitation; an absence of the openness and enthusiasm that permeated the interviews with nurse leaders having extremely high transformational scores.

Adult learning concepts as a major influence in selecting the most important educational experience were identified. Concepts mentioned by the nurse leader identifying a continuing education program sponsored by a professional organization as the most important formal educational activity included: discussion and problem solving related to real "work" problems, opportunity to immediately apply at work concepts presented in class, open and honest approach of a knowledgeable instructor that facilitated group interaction, and many visual aids and handouts that could be used later. The most important previous formal educational activity for the second nurse leader in this low transformational extreme case group was a

specific undergraduate nursing leadership course. Comments indicating the influence of adult learning concepts in selecting this formal experience as most important included: identify a problem and implement solutions on an actual nursing unit; excellent, enthusiastic faculty -- asked prodding questions and responded to answers with more questions; and the thinking process was critical.

Mentorship and informal networking were listed as the most important informal educational activity by these two leaders. Mentorship as defined by these leaders incorporated the guidance given by a former supervisor described as a tremendous leader who was open and receptive to helping and developing others. Mentor characteristics included providing clearly defined expectations, being very knowledgeable, willing to listen and create a feeling that you have been heard, and never revealing shared confidences. On the job training and formal networking was spontaneously defined as a component of mentorship. The following explanation was given for informal networking: "What I do, is before I sit down and talk, I try to work out in my mind what I should do. If there is something I'm unsure about then I seek moral support. Then I sit down and say, I might try this -- what do you think?" Characteristics identified as essential for including an individual in one's informal network were: ". . . been around the organization for a while, they know the norms, and if you're not sure how your

boss is going to react to something you check that out, see if you can find out that."

One of these leaders with the lowest TFL score selected the one educational activity having the most influence on leadership development based on a belief that the foundation for all that encompasses leadership was attained in a formal leadership course. The other nurse leader offered no explanation for the ranking process. The following responses reflected their decision making for selection of the most important educational activity:

> **Response A.** That's real hard, that's a tough one. I guess if I had to come down to it, I think my formal leadership course is still the most important one because it gave me the foundation. And that doesn't change. That's the foundation for everything.
>
> **Response B.** Probably, the mentorship would be most important. It had the most importance. It would be followed by the continuing education workshop secondly and then I think I would go down to on the job training. I think the school of hard knocks is where you learn a tremendous amount followed by networking.

During the phase of the interview focusing on leader satisfaction, there was a noticeable absence of transformational factors as contributors to job satisfaction. However, frequently, the dissatisfaction factors that were described indicated an absence of specific transformational traits in these leaders and their supervisors. Examples of these absent factors follow:

> <u>Visionary Behavior Example</u>
>
> 1. In the past there was a lot of positive feedback. I'm not feeling that now.
> 2. I expect a mutual respect (from supervisor) and I

don't always get that -- I'm feeling more of the negative.
3. I hear this was not what we (administration) expected and yet I wasn't sure what they expect. That's real difficult. I'm really unsure of what expectations are. Not knowing, that's the most difficult part.

Visionary Characteristic Example

1. I guess its like a sandwich, being in the middle all the time.

Visionary Culture Building Example

1. Having to explain some policy, some actions that are decided up here (administration) but you really had no input into it, but you have to support it and explain it. You feel real uncomfortable. A lot of conflict.

Though very limited and stated without enthusiasm or positive attitude, some factors that indicated a slight presence of TFL factors were reported by one leader with a low TFL score:

Visionary Characteristic Example

1. I try to do the best for my staff that I can possibly do.
2. When I feel I do what I can for them, they also put their best effort forth.
3. Knowing that what I do try to do helps, giving them a good schedule, giving them the independence they need.

Visionary Culture Building Example
1. I look at staff satisfaction. Their satisfaction with basic working conditions.

The tone of these comments from the extreme group having a low degree of transformational leadership was clearly less positive, not focused on developing the staff member, and lacked insight into visionary traits required to enhance

their own performance and performance of others. One of these leaders commented, "I think sometimes I get caught up in the little details, its hard for me to get the time to see the big picture." This comment was in direct opposition to the transformational characteristic of having a clear vision, articulating that vision, and implementing a long range plan to achieve the vision. The leader with the lowest TFL score provided this vision of the future:

> I feel like that staff nurses, they have a little ways to go in looking at this whole concept of independent practitioner down pat. They tend to rely on whatever the culture of the facility is. "Whatever comes down, I'll do it." They have a little ways to go. I think that is something we need to work hard on, getting them to be accountable over the next couple of years.

During this response the emotional attitude of this nurse leader became quite sad with a feeling of despair and hopelessness invading the interview. No evidence of this leader's ability to or responsibility for initiating measures to facilitate movement of this staff toward the goal appeared. The visionary behaviors, visionary characteristics, and culture building skills associated with transformational leadership are glaringly absent in this account by the nurse leader having the most extreme low TFL score.

These two nurse leaders with the lowest TFL scores in the sample did not articulate differences in perceived importance of formal and informal educational activities. Both were described as important with formal education being

reported as essential in providing a basis for role functioning. The inference seemed to be that formal education needed to occur first followed by informal with both being important. However, knowledge was perceived to be obtained through formal processes with only "tasks" learned through informal processes.

Critical Case Group

Criteria for nurse leader assignment to the critical case group included having a high or low TFL score and current job dissatisfaction. Two participants met the criteria based on TFL scores of 215 and 174. The nurse leader reporting a low degree of transformational leadership graduated from a diploma nursing program and also had a liberal arts associate degree while the nurse leader with a high TFl score had both an associate and baccalaureate degree in nursing. Both of these participants had seven years of nursing leadership experience. Though these leaders with contrasting transformational leadership patterns both reported a high level of job dissatisfaction, the factors contributing to the dissatisfaction were dissimilar. Continuous interruption of daily schedule, responsibility for additional nursing units, absence of designated unit level assistant leaders in the new areas of responsibility, recently acquired nursing unit staff (registered nurses) demonstrating behavior that is

incongruent with the nurse leader's "expectations for professional nurses", and frequent turnover in the nurse executive position creating unstable performance expectations contributed to a high level of dissatisfaction for the leader with a low TFL score. The dissatisfier for the nurse leader with a high TFL score was an organizational norm supporting bureaucratic control which blocked any leader effort to empower staff nurses as proactive participants in patient care and administrative decision making.

The prior formal educational activity indicated as having the most important contribution to leadership development for the participant rated as a low transformational leader was a continuing education course developed by the corporate level training and development department of the hospital while a specific undergraduate nursing leadership course served this function for the nurse with a high TFL score. Group interaction -relating with other managers - was the only adult learning concept to emerge from descriptions of the continuing education experience. Whereas, spontaneous, enthusiastic phrases about the nursing leadership course such as ". . . focusing on our needs, fostering any idea, nothing was ever bad, empowered to design our own path, we controlled the course, and focused in realities" clearly represented the adult learning principle of meeting the needs of the learner and

not the teacher, problem centered, and valuing of learner experience and knowledge. The importance of structuring educational activities based on adult learning concepts was revealed by the following comment:

> It wasn't the content -- the one, two, three pieces of information. Those parts that I despise so much about our (nursing) education system. It was the process and my biggest concern in nursing education is that there is too much content sometimes.

The nurse leader with the low TFL score ranked on the job training as the educational activity most important as well as the most important informal educational activity influencing her leadership development. According to this participant on the job training assures that one knows the policies, the available equipment, and procedures for acquisition of supplies and equipment. She elaborated that:

> . . . knowing all those things makes that part of the job easier . . . I felt I couldn't do basic management without on the job training. I feel like the best managers, the best head nurses, have very strong clinical backgrounds and then basic management would teach what ever else I didn't learn as a staff nurse.

This explanation was given as her rationale for selecting on the job training as the most important educational experience in facilitating her leadership development and was suggested that it should be the same for all nurse leaders.

Mentorship was the major educational contributor to the high transformational leader's leadership development. This leader articulated the role of mentor as the overriding

leadership development factor whether discussing the formal activity of a undergraduate nursing leadership course or ranking importance of informal activities and all activities. Terms and phrases used to describe the influence of the mentor and mentoring relationship included:

> 1. She was not only a mentor, she was my advisor, and she was a real good friend.
>
> 2. It was her -- her ability -- she empowered people. You always felt like it was your idea even when it was really hers.
>
> 3. I have the utmost respect for them (mentors).
>
> 4. They're the kind of people we need in nursing. They are those rare gems. Unfortunately, they're the exception to the rule. They're the kind of people you want to clone.
>
> 5. They are the kind that really aren't aware of what they're doing, well maybe they are, but it's just the way they are. That's why they're good at what they do. They're not setting out to be revered, to be held in awe. But people do, and all you ever hear about these people is how great they are and what they do for you. And of course, their response is, oh no, that's just my job.

This leader summarized the mentorship explanation by saying, ". . . so that to me would be the most important educational activity as a nurse leader. That mentorship from those four women -- what they've given to me." These mentoring descriptors applied to mentoring experiences with a faculty member as well as three former supervisors.

Interestingly, this nurse leader with the high TFL score listed on the job training as the second most important educational activity. The meaning or definition

assigned to on the job training was reflected in the following response: "The hallway type thing. It could be interactions that happen right out of the clear blue. The kind of stuff you didn't have time to think about when it happened. But later you had time. And you thought, oh, that's how that happened. That to me is OJT. And you really learn from that." This belief about OJT indicated a focus on understanding the subtlety of communication, the stated and unstated agenda present in each interpersonal interaction, the reception and translation of the sender's message. In contrast, the nurse leader with a low TFL score viewed OJT as only the learning of procedural tasks.

Positive or absent elements of the various components of transformational leadership were prevalent in the language used by these two nurse leaders when describing job satisfiers and dissatisfiers. The terminology used in the descriptive responses reflected either a positive example of a specific transformational trait or the presence of a behavior, characteristic, or skill that was in direct opposition to the particular transformational trait. Leader responses with the respective TFL traits are listed according to degree of TFL in table 35.

Content analysis of these two very dissatisfied leaders descriptions revealed no comments indicative of visionary characteristics were present for the leader with a low degree of transformational leadership. Further content

Table 35.--Transformational Language for Dissatisfied Nurse Leader by High and Low TFL Group

TFL Dimension	High TFL	Low TFL
Focused Leadership		I have certain things I expect of all my nurses and that's to be professional, to be accountable. I'm a very, very hard person on myself. I have extremely high ideals. I have high ideals for the people who work for me.
Communication Leadership	Teach leaders how to make people want to do. I hate that word manager. Well, I can manage a budget just fine, but I want to lead people.	Need a strong role model who can guide and teach you.
Trust Leadership		What I do try to do is be fair. I try to be fair to everybody.
Respectful Leadership	I want them to feel very good about working. I want them to know what they're doing when they do it. I want them to be the best they can be at this particular place and to know they're the best.	I don't think it's right to be so rigid. I've always tried to have certain rules but allow some latitude. The nurses think think I'm very tough. I don't think I'm tough, I think I want you to do your job. You know what the rules

Table 35-Continued

TFL Dimension	High TFL	Low TFL
		are, you're a professional person. You what the rules are, do your job.
		Allow the staff to
		be flexible, make their own decisions as long as things are going good.
Risk Leadership	To become leaders within themselves.	Freedom to make management decisions, but there is a lot of risk involved.
	I'm very goal oriented.	
Bottom-line Leadership	I want to make a difference. That's the only reason I do it (stay in job).	
	I have so much potential in my unit and people that are so intelligent that have never been allowed to do anything with it. As soon as I figure out how I'm going to get a way somehow, I'm trying to work it now. I know change is slow. I'm convinced I can make these changes for these people (staff nurses).	
Empowered Leadership	I want to empower them to make own decisions.	
	Ability to empower people.	
	I'm not in this for the power. My power lies outside this place (the hospital).	
Long-term Leader-	I always like a challenge. It can't be the same way every day. The thing that's keeping	

Table 35-Continued

TFL Dimension	High TFL	Low TFL
ship	me here is the challenge.	And I keep thinking, well, I'm coming back tomorrow so I can change it.
Organizational Leadership	If you want end results and outcome from these people, they have to think it's theirs.	I think the most important thing is to grow.
Cultural Leadership	The other thing I want, I want people to be self-governed. I believe in self-governance.	When things start going sour, that's when I step in. I believe you have to change with the situation.

analysis indicated comments for this participant focused onthe leader and her perception of self while the high scoring leader emphasized the staff, creating an environment that supported "performance beyond expectation". This high scoring dissatisfied leader evokeed positivism and hope while the aura of negativism and powerlessness was present for the dissatisfied leader with a low TFL score. Each leader concluded with a very powerful, different message: a need to experience transformational leadership from the organizational environment as compared to a need to be secure in self-knowledge and feel self-confident.

Typical Case Group

Two nurse leaders, one with a transformational score of

193 and being very satisfied and the other with a score of 191 and dissatisfied, comprised the typical case group. These two leaders had 9 to 10 years of leadership experience and had been in their current position 2 to 4 years. Their academic nursing education represented both the diploma and baccalaureate approach to registered nurse preparation. The satisfied leader supervised 13 staff members whereas 54 employees were supervised by the dissatisfied leader. Again, major differences in the interview tone existed based on the degree of job satisfaction present. The satisfied, baccalaureate prepared leader was very positively focused on the strength of her employees with the diploma prepared, dissatisfied leader more focused on a historical absence of organizational support for nursing leaders and personal educational deficits described as inhibiting her desired level of leadership performance.

The formal educational activity identified as having the most important contribution to leadership development was a continuing education experience for both leaders. The dissatisfied leader described an ongoing agency management development workshop for hospital managers as being most influential in her development. Workshops provided by two independent professionals serving as individual continuing education providers were identified by the satisfied leader as having major influence in her development. Rationale for selection of these activities was very different: the first

was selected for the knowledge provided and resultant hospital formal and informal network which emerged; the other continuing education experience served to validate the leader's personal beliefs regarding human resource management that emphasized value and worth of the worker.

Although the factors contributing to the selection of these similar activities as most important differed, the adult learning concepts influencing the high ranking for these continuing education experiences were similar. Providing information pertinent to "my needs', fostering group interaction and problem solving, using audiovisuals to enhance presentations and "handouts" that could be used later in the work setting, and an enthusiastic, knowledgeable presenter who "understands the real world" reflected adult learning concepts identified by both nurse leaders. Comments such as ". . . it was a realistic approach, made it seem workable, and gives us definite guidelines for what we are doing" indicated the use of problem centered learning, a primary adult learning concept, in these educational activities.

The informal educational activity having the most important contribution to leadership development for these two moderate transformational leaders were informal networking and role modeling by current supervisor. The definition offered for informal networking was:

> Finding out what is being done through whatever the resources are -- whether that's being a formal

> observership or just through talking -- through finding out how somebody else is handling a particular problem or situation that comes up.

On the job training was also incorporated in the networking activity definition. The following descriptors revealed the merging of these two concepts into one experience for one of these nurse leaders:

> . . . just finding out what the role of a leader was in this organization - what the political environment was -- how much power a nurse leader would have in this facility. So this part of OJT was significant in my leadership style.

The second most important informal experience for one of these moderately transformational nurse leaders was the influence of a role model. Interestingly, the role model was described as having negative leadership behavior thereby influencing this nurse leader ". . . to develop the other side of that. Maybe that is what has driven me over the years. To be able to prove it can be done better and that there is a more effective way to doing this (leadership)." Positive role model characteristics identified as having a major contribution to nurse leader development were described by the other moderate nurse leader and included: honest, supportive, knowledgeable, and commitment to development of others. The adult learning principle of interacting with other adults having similar experience for the purpose of solving current, work related issues was the dominant theme in educational experience descriptions by these typical case participants.

When asked to rank the most important educational experience disregarding formal and informal classifications, these leaders indicated either a role model or the facility sponsored management program supported by the presence of a strong supervisory role model as most important. The dominant adult learning principle previously described clearly guided the naming of role modeling as the major educational contributor to development of leadership style by these typical case nurse leaders.

In analyzing both interviews for transformational language, indicators were prevalent throughout the satisfied leader interview in contrast to an almost total absence of transformational terminology during the dissatisfied leader's interview. The response "you've got to believe in what you're doing because if you don't believe in what your are doing how can you pass that on to your employees and be an effective leader" provided a clear example of the visionary behaviors of Trust, Respectful, and Risk Leadership. These leadership traits focus on exuding reliability, positive regard for others and self, and being deeply involved. Descriptions of a belief in staff empowerment by the leader and organizational empowerment of the leader suggested recognition of the visionary characteristics of Empowered Leadership while comments such as "I feel I have a lot to offer this facility and there is a more effective way to do this" indicated a presence of the

visionary characteristic of Bottom Line-leadership. The primary trait of Bottom-line Leadership, a belief that the leader can make a difference, was present in this comment. References to culture building skills, the third major component of transformational leadership, related to actions taken by the organization perceived as symbols reflecting value and worth for nurse leaders. No comments suggesting this leader initiated her own culture building activities were present. The only references to transformational factors by the dissatisfied leader occurred during the description of the current supervisor as a role model. The responses, ". . . she's a participative manager, there's honesty there, you have a support system, and I need to feel confident . . ." were suggestive of Trust and Respectful Leadership, components of visionary behavior. The absence of Long-term Leadership, the ability to have visions ranging five to ten years in the future can be discerned by the following excerpt:

> Not being all things to all people. I take it personally. If you ask me a favor I want to do it right now. You ask me anything and I want to do it right now, I want to get it done. I don't want to put it off. To me, if I put it off, then it's a reflection on me. I'm not doing what I'm suppose to be doing.

This inability to recognize long-term planning as a factor in effective leadership was evident for this leader. This absent visionary characteristic was also labeled as the most significant dissatisfier for this nurse leader.

A general sense of commitment to effective leadership performance permeated the interview with these two nurse leaders who demonstrate a moderate degree of transformation leadership yet had contrasting levels of job satisfaction. The satisfied leader believed she was contributing to the organization by role modeling a "participative management" style and viewed her previous educational experiences as validating her current leadership practices. The dissatisfied leader recognized personal knowledge deficits related to leadership theory and believed the current organizational continuing education for the leader group represented commitment to development of this group. She viewed this organizational behavior as new and symbolic of changing organizational culture to a more positive, supportive environment. However, she also articulated definitive ideas regarding educational needs of nurse leaders generally and hers in particular:

> My gut feeling is, we need to take as much time as needed to train the people (leaders), to train them properly. They (leaders) might be able to pass it to me. I could pass it down, and then just do it. There's a part of me, I'm a very, very hard worker -- I'm very dedicated -- I'm doing the very best I can. But there's a part of me that knows that I'm missing something. Missing something very valuable. It doesn't make me any less because I don't have it -- but let's tap into it somewhere, somehow. And I'm not the only one that feels that. I look around and see it for everybody. You hear those things with your colleagues.

This idea of "missing information" as a source of dissatisfaction permeated each interview with nurse leaders

having only diploma preparation, while nurse leaders having at least baccalaureate preparation communicated a basic level of comfort with leadership content and focused more on informal sources of information. These informal sources served to assist in the understanding and application of leadership content previously acquired through formal education.

Interview Summary

The purposeful selection and interview of these nine nurses as members of the extreme case, critical case, or typical case groups, as defined for this study, allowed for examination of the influence that educational experience contributed to the development of transformational leadership. Even though the interviewed nurse leaders represented distinct categories believed to occur as a result of leadership style, commonalities emerged related to two factors: degree of transformational leadership and amount of job satisfaction. These results are summarized in table 36.

As demonstrated in the table, little differences existed in the education identified as having a major contribution to these nurses' leadership development. The adult learning concepts used for rating an educational experience as most important were the same for all three TFL groups regardless of designation as as extreme, critical, or

Table 36.--Interview Summary Data (N=9)

Item	High TFL	Moderate TFL	Low TFL
Education	Diploma, BSN, & ADN	Diploma & BSN	Diploma & BSN
Experience	2 - 20 yrs.	9 - 10 yrs.	4 - 7 yrs.
FED	CE, graduate course, BSN leadership course	CE	CE, BSN leadership course
IED	OJT, mentor	Role model Informal network	Mentor, informal network
Most Important Education	IED+FED Mentor OJT	Role model CE+role model	BSN course Mentor OJT
Adult Learning Concepts	Work related Group process with problem solving Knowledgeabe, entusiastic, teacher Learner focused	Work related Group process with problem solving Knowledgeable, enthusiastic, teacher Learner focused	Work related Group processes with problem solving Knowledge, enthusiasm, teacher Learner focused
TFL Language	"Maximize" staff" Believe can make a difference	"Maximize" staff" Believe can make a difference or used to describe supervisor	Used to describe supervisor Self-focus No staff focus
Satisfation	Achieved through staff empowerment Values self	Achieved through staff empowerment Values self	Absent and focuses on task mastery De-values self

typical case. The primary differences were in the areas of transformational language used and job satisfaction. Those nurse leaders with high measures of transformational leadership were more satisfied and spontaneously used language matching transformational terminology, whereas the use of transformational language by those nurse leaders with low TFL scores only occurred when describing positive traits of former or current supervisors.

No interviewed nurse leader with a low transformational score expressed job satisfaction. Solutions for improving job satisfaction included gaining more knowledge of daily operations and attending more management classes.

Those nurse leaders in the typical case group (moderate TFL) were quite similar to the leaders with high TFL scores except on the variable of satisfaction. They either expressed an extremely high degree of satisfaction with much focus on the staff or emulated the self and task focused behaviors of leaders with a low degree of transformational leadership.

Nurse Leader Job Descriptions

The technique of constant comparison was used to analyze nurse leader job descriptions from eleven urban hospitals for the presence of transformational language. Based on the reviewed literature, a terminology list containing those words or phrases used to define or explain

each transformational factor was constructed. Use of this list to measure the presence of language in nurse leader job descriptions indicative of transformational factors assured consistency in analysis. This procedure allowed those phrases associated with each transformational factor representing a visionary behavior, visionary characteristic, or culture building skill present in the job description to be identified. Job description searches based on these processes revealed transformational language to be present in all eleven descriptions (table 37).

Table 37.--Urban Hospital Nurse Leader Job Description Transformational Language (N=11)

Factor	Language
Visionary Behaviors	
Focused Leadership	Clearly communicate (verbal and written) identifies priorities, shares expectations, innovative, creative.
Communication Leadership	Effective communication, seeks and gives feedback, provides non-threatening method for staff communication, listens to feelings of others, promotes emotional well-being of staff, maintains positive employee relations.
Trust Leadership	Serves as role model, functions as resource person, consistent treatment of employees, promotes cohesiveness between departments, keeps confidences, respects differences.
Respectful Leadership	Always courteous, positive attitude about others, maintain degree of sustained contribution from work group, treats others with respect and

Table 37-Continued

Factor	Language
	consideration, caring and responsive attitude, treat with dignity and provide privacy as needed.
Risk Leadership	Takes initiative, identifies opportunities for improvement, actively contributes to organization, creative, develops others, uses strategic planning, willing to experiment, serves as innovator for staff, treats mistakes as opportunity for learning, innovative recommendations, decisions well received by staff, confident, skill in getting work done through others.
Visionary Characteristics	
Bottom-line Leadership	Evaluates results, ability to develop others, effects of actions evaluated, creativity impacts on department and organization, shares information to assure effective operations, develops objectives based on outcomes, takes effective action, works with employee to assure quality work, uses staff skill appropriately, creates a "magnet" unit, uses negotiating skill to solve department or hospital problem.
Empowered Leadership	Develop staff, implement participative management, involves staff in decision making, shares knowledge, provide training and development activities, set individual goals and objectives with staff, counsel employee with potential for advancement, encourages staff decision making, shares responsibility and authority, fosters employee input for creative problem solving, staff developed to assume leadership role, delegates accountability and responsibility to staff.
Long-term Leadership	Displays foresight, conducts goal oriented performance review, assists in development of short and long range objectives for responsible areas, future skill mix needs identified, attains

Table 37-Continued

Factor	Language
	goals and objectives in specified timeframe, makes adjustments to assure optimal function of daily operations, manages daily operations.
Visionary Culture Building	
Organizational Leadership	Maintains good working relationships with other departments, attain goals, manages budget, responsible for working relationship of work group with other departments, adaptable, provides for interdepartmental cooperation, helps others, evaluates achievement of goals, responsible for attaining goals, select and retain employees whose values and skills support organization values and culture, reputation for positive relationships with other departments, unit goals and objectives achieved, creates open climate, holds staff accountable for promoting positive work environment, supports organizational objectives.
Cultural Leadership	Receptive to change and new ideas, adapts changes to department, maintain sustained contribution from work group, ability to work with others, improvement in department products/services, implements changes that improve functioning, responsible for operational excellence, devises and implements planned change, imaginative and receptive to new methodology, ability to respond positively to changing circumstances so maximizes opportunity and minimizes problems, assists in articulation and dissemination of agency culture and value system within the organization, identifies opportunities to implement change which improve operations.

Further analysis of these results revealed language reflecting at least eight of the ten factors was present in all but one job description (table 38).

Table 38.--Transformational Factors Present in Urban Hospital Nurse Leader Job Descriptions (N=11)

TFL Factor	Hospital A	B	C	D	E	F	G	H	I	J	K
Visionary Behaviors											
Focused	x					x	x	x			
Communication	x	x	x	x	x	x	x	x	x	x	x
Trust		x	x		x	x	x	x			x
Respectful	x	x	x	x	x	x	x	x	x	x	x
Risk	x	x	x	x	x	x	x	x	x	x	x
Visionary Characteristics											
Bottom-line	x	x	x	x	x	x	x	x	x		x
Empowered	x	x	x	x	x	x	x	x	x	x	x
Long-term	x	x		x		x		x	x		x
Visionary Culture Building											
Organizational	x	x	x	x	x	x	x	x	x	x	x
Cultural	x	x	x	x	x	x	x	x	x	x	x

However, only four job descriptions addressed Focused Leadership, with Trust Leadership present in six, and three omitting any reference to Long-term Leadership. One organization job description contained no indicators for two

visionary behaviors (Focused and Trust Leadership) and two visionary characteristics (Bottom-line and Long-term Leadership).

Focused Leadership assists the staff to have clarity about the issues in the work environment and assures that only the most important issues are the center of group problem solving efforts. The staff member is guided to attend to this most important issue. It was disturbing that six of the eleven nursing organizations have no transformational language suggesting this is an expected nurse leader behavior. Trust leadership, indicates the individual can be relied on to follow through on commitments and articulates the same position on issues regardless of group or person present. This trait was not represented in job descriptions from four nursing organizations. Bottom-line Leadership incorporates the characteristic of self-assurance. This self-assurance is demonstrated by leaders as a belief that they can personally make a difference, they have an effect on organizational outcomes. This "effectance" factor was only absent in one job description. Visions which suggest a commitment to creating a change in work conditions over time represent the Long-term Leadership factor. Leaders exhibiting this trait are able to clearly explain their long range views and to develop strategies that facilitate progress toward the vision. Job descriptions from three organizations contained no language

indicative of the Long-term Leadership characteristic as an expectation of nurse leaders.

In an attempt to further understand the meaning of nurse leader job description data as relates to leadership style, the variables of transformational leadership (TFL), leadership experience (LEXP), number of work unit beds (NUMB), number of employees supervising (NUME), total number of nursing organization employees (FTE), and registered nurse ratio (RN%) were computed for each urban hospital. Mean TFL scores and leadership experience for nurse leader study participants from each hospital as well as NUMB and NUME averages were computed. Actual FTE and RN% numbers were also defined. These findings are displayed in table 39.

Of the seven hospitals having nurse leaders with a moderate mean transformational leadership score, five contained no language representative of Focused Leadership in their job descriptions. Long-term and Trust Leadership language was omitted from three of these seven facilities. Yet, the job description that omitted language indicative of four transformational traits occurred in a hospital where nurse leader mean transformational scores approached a high degree of transformational leadership. The three hospitals with high transformational mean scores included transformational language in their nurse leader job descriptions for all leadership traits except Focused or

Table 39.--Nurse Leader and Organizational Characteristics by Urban Hospital

Hospital	TFL*	LEXP*	NUMB*	NUME*	FTE**	RN%**
A (N=5)	205.00	10.00	23.00	23.80	186	56
B (N=6)	203.50	8.17	26.50	35.17	245	60
C (N=10)	187.90	11.10	27.44	31.66		
D (N=4)	183.50	7.75	25.00	35.67	227	65
E (N=8)	183.88	9.88	22.57	28.63	318	60
F (N=5)	198.00	9.20	23.00	26.60		
G (N=1)	172.00	2.00	8.00	15.00		54
H (N=11)	198.82	10.82	27.64	51.90	764	67
I (N=6)	187.67	7.00	19.60	33.00	230	55
J (N=5)	195.60	9.8	27.00	45.60	300	70
K (N=5)	201.8	8.4	27.50	19.60	225	55

*Reported as mean; **reported as raw number

Trust Leadership.

None of the remaining leader or organizational variables provided data to explain differences discovered. Mean leadership experience ranged from 8.4 to 10 years for the organizations with a high degree of transformational leadership while those organizations with the moderate degree employed nurse leaders with mean leadership experience that ranged from 2 to 11.1 years. The organization's commitment to employment of professional

workers as represented by the registered nurse percentage was less enlightening. The organization having the least amount of job description transformational language reported one of the highest percentage of registered nurse workers with nurse leaders who supervised large numbers of employees and had twenty-four hour operational responsibility for larger work units. While two job descriptions included language representing all of the visionary behaviors, characteristics, and culture building traits, the nurse leader TFL scores indicated development of a moderate degree of transformational language.

Qualitative Summary

The in-depth interview findings indicated those nurse leaders with high or moderate TFL scores primarily viewed previous informal education as the major contributor to their current leadership style. These leaders identified the adult learning principles of problem centered learning that was supported by a knowledgeable, enthusiastic teacher-mentor as an essential component of effective leadership education. Their primary focus was growth and development of the worker so that staff performance was continually maximized. They were positive about their staff, their organization, and self. Even when expressing current job dissatisfaction, they energetically described a belief that they personally facilitated the formation of a positive,

productive work environment.

In contrast the nurse leaders with low TFL scores focused on tasks rather than people or organizational issues. However, their selection of educational activities as most important was based on the same adult learning concepts as nurse leaders with a high degree of transformational leadership. The second major difference when comparing this low scoring group with high or moderate transformational leaders was, no nurse leaders with low TFL scores were satisfied.

Nurse leader job descriptions for the majority of the eleven urban hospitals contained transformational language to frame the organizational expectation for these leaders. In spite of these expectations, the nurse leaders with low TFL scores used no to minimal transformational language during the interview. Those nurse leaders with a moderate degree of transformational leadership expressed minimal to high amounts of transformational language. In the moderate TFL group, those nurse leaders with lower TFL scores and more job dissatisfaction verbalized smaller amounts of transformational language.

Regarding the relationship between previous educational experiences and degree of transformational leadership, a need for education that encouraged group interaction to achieve resolution of work related problems, that was guided by a teacher perceived as knowledgeable and valuing of the

adult learner's experience, emerged as common across transformational groups.

Chapter Summary

This investigation incorporated multiple methods of data collection to determine if previously experienced formal or informal education contributed to the degree of transformational leadership present in a sample of 66 urban hospital nurse leaders. Results from the methodological triangulation of the data are diagramatically presented in figure 2.

Amount and importance of informal education varied based on degree of transformational leadership. On the job training supported by mentor-supervisor role models was identified as the most important educational contributor to leadership development by this sample of 66 nurse leaders.

Nine of the 66 nurse leaders were interviewed to gain further insight regarding the influence of education in developing a leadership style. Interview data suggested that nurse leaders with a high or moderate degree of transformational leadership valued both informal education and formal education. These two categories of transformational leaders consistently verbalized the importance of having a balance in both type of educational activities. As leadership experience increased, the informal activities of on the job training and supportive

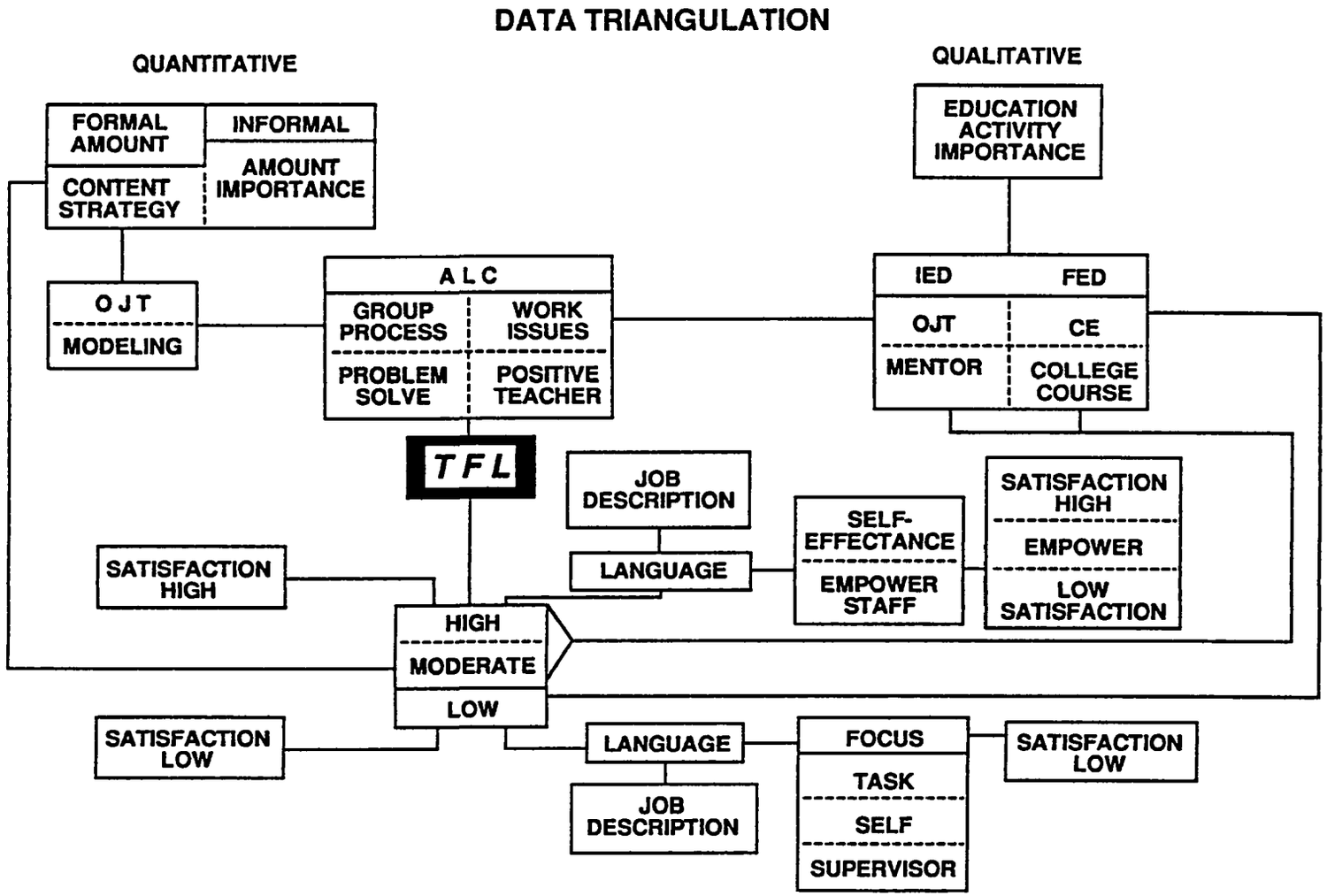

Figure 2. Transformational Leader Education

role models became a higher priority.

Both quantitative and qualitative findings supported the use of adult learning concepts as the key to an educational activity being deemed as an important contributor to leadership development. Nurse leaders with high transformational ratings measured job satisfaction by the degree of staff empowerment present, while task mastery and missing management knowledge served as the focus for nurse leaders with a lesser degree of transformational leadership. Support for quantitative differences in amount and importance of informal education based on degree of transformational leadership consistently emerged from the qualitative data. A belief that "I" can make a positive difference in organizational outcomes is frequently verbalized by the nurses with high or moderate TFL scores.

Chapter five discusses the implications of these findings and offers recommendations for design of leadership education programs for hospital nurses. Recommendations for further research related to the variables of this study are also described.

CHAPTER V

DISCUSSION

This investigation compared the educational experiences of hospital nurse leaders based on degree of transformational leadership. Possible explanations for findings related to amount and importance of the educational experiences are presented according to degree of nurse leader transformational leadership. Implications of these findings are discussed as relates to the development of transformational leadership through initiation of specific educational interventions. Concepts of adult and social cognitive learning theory identified as supporting transformational leadership development are also presented. Results relating nurse leader job satisfaction and degree of transformational leadership are included. Findings from the reviewed literature as well as the theoretical underpinnings of this study provide support for these conclusions. Based on these findings and their implication for development of transformational nurse leaders, recommendations for future research are offered.

Amount of Education and Transformational Leadership

Differences in amount of formal content, formal

teaching strategies, and informal education occurred based on degree of transformational leadership for this sample of 66 hospital nurse leaders employed at 11 different urban hospitals. Yet, no differences in amount of formal education existed when degree of transformational leadership varied. Those nurse leaders with a higher degree of transformational leadership participated in larger amounts of formal content, experienced a larger variety of teaching strategies, and received more informal education than those nurse leaders with a moderate or low degree of transformational leadership. These findings are supported by the concepts of transformational leadership.

According to transformational leadership theory, transformational leaders have a vision for the future and are committed to growth and development of self and others as one mechanism to support attainment of the vision. Transformational leaders believe they can make a difference in organizational outcomes. This positive organizational impact occurs as a result of leader knowledge and understanding of the current culture combined with a well articulated plan for achieving their futuristic vision.

When comparing the high and low transformational nurse leader groups, a higher percentage of the high scoring group had attained at least a baccalaureate or higher academic degree. These nurse leaders by virtue of their academic preparation experienced larger amounts of classroom content.

Due to the design of baccalaureate education, they were likely to have experienced a larger number of teaching methodologies than nurses educated in diploma or associate degree nursing programs. Ibarra[1] concluded that participation in specific educational activities was likely to result in educational need recognition by participants, thereby, fostering further participation. Though Hefferin[2] found no differences in leadership effectiveness based on program design, this current study suggested a larger variety of formal teaching strategies were experienced by nurses with high transformational leadership scores as compared to those with low scores. Additional support for the effect of content and design on leadership style was provided by the finding that the six masters prepared nurses in this study were in the high transformational group. Findings of this study indicating that nurses with graduate education demonstrate effective leader behaviors are also corroborated by Lafferty, Ulrich, and Kirsch.[3] The instructional design differences found in baccalaureate education could also explain the increased informal educational experiences of the high transformational group. The inquiry mode of learning is most frequently encouraged

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[1]Ibarra, "Education Needs," 36-39.

[2]Hefferin, "In-service Effectiveness," 399-422.

[3]Lafferty, Life Style Inventory; Ulrich, "Value Differences," 290; Kirsch, Middle Manager, 208.

in baccalaureate programs. Learning occurs through reflection and as a by-product of experience when using this mode. Informal education is designed to facilitate the inquiry mode of learning. Therefore, the high transformational group by virtue of their previous formal academic education may have a well developed preference for informal education.

Another plausible explanation for the increase in informal education for the high transformational group may be related to their larger amount of leadership experience. Though there was no statistical significance between educational differences and leadership experience, the high transformational group had more leadership experience than the moderate or low group. A four stage model for professional development developed by Beeler, Young, and Dull[4] offered insight regarding the variable of experience. Perhaps, the more experienced nurses were entering a stage of professional maturation which was characterized by self-confidence and information sharing. A major transformational trait is a belief in self and a need to achieve power through enhancement of the organization. Informal processes allow access to the information needed to achieve power and empower others. Therefore, the finding

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[4]Judith Beeler, Patricia Young, and Susan Dull, "Professional Development Framework: Pathway to the Future," Journal of Nursing Staff Development 6, no. 6 (1990): 296-301.

that experienced nurse leaders who exhibited a high degree of transformational leadership have participated in large amounts of informal education as contrasted with the lesser amounts of informal education experienced by the low transformational group was not surprising.

Perhaps, the differences in utilization of informal education were actually a result of the increased leadership experience itself. An increase in leadership effectiveness as a result of experience was reported by Adams[5] and McCarty[6]. As a result of their increased experience, these more developed transformational leaders may have recognized the potential contribution informal processes provided to their own effectiveness. Therefore, this group not only valued informal education, but perceived that how the information was utilized once obtained as being of major importance.

Importance of Education and Transformational Leadership

Informal education was the only importance study variable that varied when considering degree of transformational leadership. This difference occurred with both quantitative and qualitative findings. Nurse leaders having a high degree of transformational leadership rated informal education as more important than those nurses with

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[5]Adams, "Leadership Behavior," 36-39.

[6]McCarty, "Behaviors of Nurse Administrators," 3007B.

a lesser degree of transformational leadership. In addition the informal educational activity of on the job training and role modeling (current or former supervisor) was ranked as the most important educational contributor to leadership development by the high and moderate transformational groups while the low transformational group ranked formal education as most important. Definitions of on the job training and role modeling provided by the high and moderate groups suggested these activities were components of the broader concept of mentorship. Mentor descriptions by this sample were congruent with those offered by Yoder, Presthodlt, and Boyle and James.[7]

Burns and Sashkin[8] suggested that transformational leadership can be developed. Elaborating further on this issue, Sashkin[9] concluded that any leader can learn and practice visionary behaviors. These beliefs regarding transformational leadership were clearly substantiated by this sample of nurse leaders. The high transformational nurse leader group reported high amounts of informal education which were rated as very important. On interview these nurses verbalized with precise clarity the need to

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[7]Yoder, "Mentoring,", 9-19; Prestholdt, "Modern Mentoring," 20-27; Boyle and James, "Nurse Leaders as Mentors," 44-48.

[8]Burns, Leadership, 20; Sashkin and Fulmer, "Leadership Theory," 46.

[9]Sashkin and Fulmer, "Leadership Theory," 46.

have a mentor or role model who guided and supported one in developing an effective leadership style. Support for these descriptions as accurate representation of the mentoring process were provided by Zalesnik.[10] These personal and private mentoring relationships fostered progressive improvement in leadership style.

The highly developed transformational leaders who experienced mentoring were very committed to the staff member's growth and development; the empowerment of the worker to perform at the highest potential possible. This idea of mentored nurses serving as a willing mentor to others was reported by Kinsey.[11] This emphasis on promotion of staff autonomy by the high transformational study group was also supported by Barker's[12] discussion of transformational leadership in nursing.

In contrast nurse leaders with minimal transformational development identified very different educational needs. These needs were primarily concerned with obtaining the knowledge required to successfully complete management tasks and procedures rather than on staff member development and empowerment. Maguire's[13] finding that work units designed to

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[10]Zalesnik, "Leaders and Managers," 26.

[11]Dianne C. Kinsey, "Mentorship and Influence in Nursing," Nursing Management 21, no. 5 (1990): 45.

[12]Barker, Transformational Nursing Leadership, 2-4.

[13]Maguire, "Staff Nurse Perceptions," 34-38.

promote staff nurse autonomy had leaders who demonstrated higher relationship behavior provided insight regarding educational need differences of the high and low transformational groups.

The essence of transformational leadership behaviors and characteristics is to maximize worker performance through open communication, establishing trust, and creating respect. Worker ownership of the rights and responsibilities associated with an autonomous work environment are expected behaviors in this type of organizational climate. The nurse leader having limited development of transformational leadership struggles to survive the demands of daily operations due to knowledge and skill deficiencies. Until these needs are satisfied, the leader will be unable to move to higher level needs. The major premise of adult learning theory is the importance of meeting the current work related problems of the adult learner. Puetz and Peters[14] lend additional support for this notion in their discussion of nurses as adult learners. They emphasized the readiness of nurses, as adult learners, to participate in learning activities was contingent on the presence of a perceived need. Therefore, the rating and description of on the job training as the most important informal activity for the low transformational group would be anticipated. This group

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[14]Puetz and Peters, Continuing Education.

could not possibly move to an intense personal relationship such as mentorship until their need for daily operations information was met. Task and procedure information characterized this group's definition of on the job training.

Regardless of classification as a high, moderate, or low performing transformational leader, this sample of hospital nurse leaders articulated positive outcomes from their learning experiences. Each group was able to identify needs, rate an educational activity as most important, and provide rationale for the importance rating. In terms of overall importance, the high and moderate transformational group ranked the informal educational activity of mentoring first while formal education in the form of a college course or continuing education was ranked first by the low transformational group. As a result of these activities meeting their current work related needs each group verbalized having sought repeated similar experiences. These behaviors lend support to the idea that when expectancies associated with an experience were positively met, the individual was stimulated to seek further learning. This proposition is a major concept of social cognitive theory, one of the supporting frameworks for this investigation.

However, group differences emerged regarding the transformational trait of Bottom-line Leadership. The high

and moderate transformational groups believed they contributed a definitive, positive influence on work and organizational productivity. This belief in self is labeled as an "effectance" factor in transformational leadership theory and as self-efficacy in social cognitive theory. Perhaps, development of trust in one's ability is dependent on both internal and external factors. If so, the mentor's role in communicating respect and trust in the leader's ability may have provided the external reward that stimulated further seeking and testing of leadership knowledge and skill. The informal experiences of the highly developed transformational leader may possibly be a major factor that contributes to the enhancment of a transformational style in any leader.

Adult Learning and Transformational Leadership

For this study sample of hospital nurse leaders from 11 different urban hospitals no differences were identified in the influence of adult learning concepts on the ranking of an educational activity as most important. Nurse leaders with a high, moderate, or low degree of transformational leadership agreed on the adult learning concepts that influenced their decision making about educational activity importance. The concepts identified included having experienced participant group problem solving regarding a current work related issue. The problem solving efforts

were perceived as more valuable when guided by a teacher demonstrating expert knowledge and a positive attitude toward the learners. These findings were validated by both qualitative and quantitative data. Knowles'[15] discussion of adult learning theory implied these concepts were operant for any group of adult learners. The inquiry and performance mode of learning posited by Houle[16] dominated the preference of this sample. Though a small sample, this group of heterogenous hospital nurse leaders working in six different type of hospital environments consistently reported the same adult learning concepts as most important. These findings are offered as further evidence of the universal importance of including these principles when designing educational programs for adult learners regardless of target group.

Job Satisfaction and Transformational Leadership

Though not a primary focus of this study, leader job satisfaction was believed to be a factor associated with development of a transformational leadership style. Bass and Sashkin repeatedly documented the association of transformational leadership with worker job satisfaction. This association was also reported to be present in "magnet hospitals" which by definition had nurse executives

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[15]Knowles, Andragogy in Action, 44.

[16]Houle, The Inquiring Mind.

demonstrating behaviors indicative of transformational leadership. No empirical evidence for an association between leader job satisfaction and transformational leadership traits was found in the literature. Therefore, the quantitative and qualitative results of this study demonstrating a linkage between a high degree of transformational leadership and leader job satisfaction offers new knowledge.

Only one leader with a high transformational score reported job dissatisfaction. This leader's low level of job satisfaction was linked to a bureaucratic work environment that severely restricted staff nurse autonomy. In response to the open-ended question on the Leadership Development Inventory and during interview, the effectance factor emerged as driving this leader to change the organizational inhibitors to staff nurse empowerment. The response of this leader was supported by Bandura and Cervone's[17] study of self-efficacy.

Perhaps, the dissatisfied nurse leaders in the moderate and low transformational groups represented the multidimensional influence of low self-efficacy and minimal external rewards. By not believing in themselves compounded by an absence of positive feedback from supervisor, they continued to expect job dissatisfaction to occur. This

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[17]Bandura and Cervone, "Self-efficacy and Goal Synthesis," 1024.

expectancy then became a self-fulfilling prophecy which they were unable to interrupt due to low amounts of "effectance." In contract the highly satisfied, high transformational nurse leaders desired to achieve a goal, believed it could be accomplished, and when it was achieved regulated their performance efforts by working even harder to enhance staff empowerment. That is, self-regulation, self-efficacy, and effectance factors operated to enhance the transformational traits of highly developed transformational leaders. Further development of those traits in leaders with a minimal degree of transformational leadership were prevented or inhibited by absence of these factors.

Additional insight was gained when expectancy and self-regulation were considered as cognitive processes that allowed people to alter environmental conditions through anticipating the future based on previous experiences. This notion of changing the environment after completing a cognitive assessment of the current situation and comparing it to previous experiences was described by Pervin[18]. This ability to anticipate the future is congruent with visionary behavior. Therefore, when expectations were unclear as a result of inconsistent or conflicting feedback, organizational support was absent for visionary development. Quantitative and qualitative data reflective of this type of

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[18]Pervin, Personality, 393.

organizational climate was consistently reported by the low transformational nurse leaders.

Conclusions

Several conclusions regarding educational activities and development of transformational leadership are derived from study findings. Conclusions are also supported by the theories framing this investigation and the literature from multiple disciplines. The development of transformational leadership does appear to have been influenced directly and indirectly by specific educational activities. In this study nurses with a baccalaureate or higher degree, more than five years of leadership experience, and large amounts of informal education perceived as very important demonstrated a high degree of transformational leadership. These nurses were very satisfied in their current job, promoted staff nurse empowerment, and believed they made a positive difference in the work environment. The most important educational experience contributing to their leadership development was the informal activity of mentoring. Factors listed as influencing this ranking were the opportunity to engage in problem solving, be respected, and have available an expert who supports them as well as gives them the necessary negative feedback that allows for correction of mistakes.

Given these findings, the fostering of informal

mentoring for nurse leaders would seem to be an essential strategy for development of transformational leadership. However, as informal experiences are dependent on factors not within the control of the organization, development of formal mentoring programs is recommended. Formal mentoring programs that would enhance the mentoring skills of the mentor and the mentees acceptance of mentorship should be developed. This proactive commitment to fostering transformational leadership in nurse leaders is believed to be essential for the survival of productive, professional, nursing organizations within hospital settings. The mentoring program should emphasize the use of those adult learning concepts described by this sample as having a positive contribution to leadership development. As noted by Anderson and Shannon[19] these formal programs should include: clearly defined relationships, a conceptual basis for the relationship, discussions of essential role functions and activities, and mentor characteristics considered to be prerequisite to successful mentoring. Other factors to consider in developing formal mentoring relationships are suggested by Gerstein:[20]

Ensure the voluntary participation of mentors.

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[19]E. M. Anderson and A. L. Shannon, "Toward a Conceptualization of Mentoring," Journal of Teacher Education 39, no. 1 (1988): 38-42.

[20]M. Gerstein, "Mentoring: An Age-Old Practice in a Knowledge-Based Society," Journal of Counseling and Development 64, no. 2 (1985): 157.

Minimize the rules and maximize the mentor's personal freedom.
Create networking possibilities for mentees.
Share and negotiate expectations between mentors and mentees.
Reward mentors and increase their visibility.
Include the managers of proteges.

The success of the mentoring program is believed to be partially linked to the support given by the mentee's supervisor to the mentoring program. Failure to include this individual in the implementation of a formal mentoring program for a nurse leader is likely to impede the mentoring process.

These formal programs on mentoring should according to Prestholdt[21] ". . . include training on how to encourage and praise proteges, promote other's strengths, and provide career counseling. Proteges also need educational preparation on how to attract and work with mentors." Therefore, based on these recommendations for formal mentor program development, the importance of not underestimating the significant role played by the leader in need of mentoring is stressed. Energy should be directed at preparing both potential mentors and mentees for their role and responsibility in a mentoring relationship. The importance of evaluating program effectiveness is emphasized by Kram.[22]

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[21]Prestholdt, "Modern Mentoring," 26.

[22]K. E. Kram, "Improving the Mentoring Process," Training and Development Journal 39 no. 4 (1985): 40.

In addition to these suggestions for supporting transformational leadership development, a specialized leadership orientation program is needed. Each interviewed nurse leader described experiencing unnecessary frustration and confusion that was perceived to be directly related to an absence of a formal leadership orientation program. The critical role of this type of activity was promoted whether the leader was new to the organization, new to leadership, or both. Sample participants suggested developing a structured formal orientation process that was interspersed with time for application and exploration of informal activities (networking, observing other leaders, seeking a mentor, and reflection). These suggestions for a structured orientation which included formal and informal processes were recently validated in the literature.[23]

As a result of this study it is also recommended that leadership development not cease with the termination of the formal orientation time period. Ongoing formal and informal educational opportunities that match the learning needs and stage of professional development for the respective nurse leader are suggested. Organizational support for frequent informal "discussion" groups are believed to be an unexplored strategy to promote interacting between various

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[23]Linda Werkheiser, Patricia Negro, Barbara Vann, Marilyn Holsted, Jill Byrd, and Janet Talge, "New Nurse Managers: Part I - Orientation for the Nineties," Nursing Management 21, no. 11 (1990): 56-63.

leadership levels. Efforts to promote horizontal as well as vertical leader interaction could offer rich organizational rewards. The employment of a full-time human resource consultant having the skill and willingness to provide confidential, unplanned, immediate advice and listening is a model proposed by Hollefreund, Clark, and Wadsworth.[24] This approach has merit for developing and enhancing the visionary behavior, characteristics, and culture building skills considered to emulate transformational leadership. The opportunity to engage in problem solving discussions with peers, experts, and other leaders is more important than the content presented.

Implications discussed thus far are centered on hospital organizational strategies intended to improve or development transformational leadership practice in nursing organization leaders. It is also the belief of this researcher that attention must be given to the curriculum of graduate programs in nursing administration. Currently, rather than empirical data guiding the curriculum design of these programs, the philosophy and experience of the nursing administration faculty bias program content, teaching strategies, and resultant student outcomes.

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[24]Barbara Hollefreund, Nancy L. Clark, and Nancy S. Wadsworth, "The Human Resource Consultant in Nursing," Journal of Nursing Administration 16, no. 7,8 (1986): 21-25.

Scalzi and Wilson[25] used findings from a survey of nurse executive job functions to support content suggestions for a graduate program in nursing administration. However, no measurement of effectiveness of nurse executive performance was obtained. Therefore, job functions may have represented ineffective functions of some survey participants. No suggestions for method of teaching content were included. Additionally, no strategies specifically designed to enhance the development and practice of a particular leadership style were discussed. Therefore, based on findings reported by Scalzi and Wilson and the findings of this study, attention to leadership practice outcome as well as management content seems to be a crucial area for inclusion in any administration program.

In order to create and implement the strategies depicted as fostering development of transformational leadership, consideration of one final factor is important. These innovative approaches to leadership development must be supported by executives (hospital and educational programs) in decision making positions who are not vested in control but are committed to empowerment of less experienced, less well developed leaders (employees or

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[25]Cynthia Scalzi and David Wilson, "Empirically Based Recommendations for Content of Graduate Nursing Administration Programs," Nursing and Health Care 11, no. 10 (1990): 522.

students). It is notable that in Dunham and Klafehn's[26] national survey of nurse executives, transformational leadership was reported to be a dominant behavior of this key group of hospital leaders. This researcher believes the unit hospital nurse leader has a pivotal role in transforming nursing organizations. However, without the presence and support of nurse executives who portray transformational leadership, the hospital nurse leader's progression toward this goal will meet formidable resistance.

Recommendations

Findings of this investigation suggest consideration of the following recommendations:

1. As significant findings have been obtained from a convenience sample in one geographic region, replication of this study using a random, national sample would increase generalizability of results.
2. Participant responses to questionnaire open-ended questions and on interview indicated that transformational leadership and nurse leader job satisfaction were associated. Further exploration of this finding through quantitative investigation is needed.
3. Analysis of interview data revealed dramatic attitudinal differences among high and low transformational nurse

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[26]Dunham and Klafehn, "Transformational Leadership," 30.

leaders. Further investigation of factors having the potential to influence the more positive responses of the high transformational group and the powerless behavior of the low transformational group would be important.

4. Based on study findings, educational programs designed to support the development of transformational leadership are a logical next step. Measurement of transformational leadership development resultant from formal and informal educational intervention would allow examination of the hypothesis that transformational leadership can be learned.

5. The majority of hospital nurses and nurse leaders are females employed by organizations having predominantly male leaders. Study of transformational leadership has been almost exclusively conducted with male executives. Therefore, evaluation of organizational variables facilitating and inhibiting the practice of transformational leadership by nurses would provide more complete data regarding the effectiveness of transformational leadership as a strategy for enhancing organizational productivity.

6. Comparison of organizational variables facilitating and inhibiting the practice of transformational leadership by female and male leaders within hospital organizations would allow determination of gender differences and provide focus for improving organizational outcomes.

7. Further testing of the Leadership Behavior Questionnaire scales as representative of a ten factor model of

transformational leadership is needed. Perhaps, utilization of this instrument with a predominantly female sample influenced scale performance.

8. The Leadership Development Instrument, as a newly developed tool, performed exceptionally well. However, refinement of this instrument to allow measurement of content and strategies associated with specific educational activities would facilitate effective design of future programs intended to enhance transformational leadership practices of participants.

Summary

This study has attempted to determine if educational practices of nurse leaders influenced the development of transformational leadership. There is much confusion in the literature and in administrative practice regarding the term leader and manager. The emphasis for this investigation was leadership. Nurse experts in health care agencies and academia agree that a current nursing leadership crisis exists. There is also agreement that this crisis has major implication for the continued recruitment and retention of individuals choosing nursing as a career.

As the majority of nurses work in hospitals, nurse leaders in this setting served as the study sample. This researcher believes that effective leadership offers the key to worker satisfaction. As a result of organizational

restructuring of hospitals due to decreasing financial and human resources, the hospital unit nurse leader has been given a pivotal role in achieving improved organizational productivity. Much attention has been given to the unit level daily operational management as an important component of the nurse leader's responsibility.

However, limited emphasis on developing the leadership potential of these key leaders has occurred. The literature clearly documents linkage between nurse leader behavior, and staff nurse job satisfaction and job retention. Transformational leadership theory offers a method for improving organizational productivity through improved commitment of the worker. Therefore, at least equitable resources must be allocated to the leadership as well as management development of key organizational members. Organizations which survive into the twenty-first century will have recognized a basic truism espoused by Bennis,[27] "Leaders are people who do the right thing; managers are people who do things right. Both roles are crucial, but they differ profoundly."

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[27]Warren Bennis, "Learning Some Basic Truisms about Leadership," Phi Kappa Phi Journal 71, no. 1 (1991): 13.

APPENDIX 1

LEADERSHIP BEHAVIOR

QUESTIONNAIRE

Leadership Behavior Questionnaire

Permission was obtained from Marshall Sashkin for use of this instrument during this investigation for research purposes only. This instrument may not be reproduced due to copyright protection. To obtain further information contact Organization Design and Development, Inc. (2002 Renaissance Boulevard, Suite 100, King of Prussia, Pennsylvania, 19406).

APPENDIX 2

LEADERSHIP DEVELOPMENT

INVENTORY

Leadership Development Inventory

Part I

Directions: Please complete each item or select the appropriate response(s) by placing a check by those applicable.

1. Position title:_____

2. Number of years nursing experience:_____

3. Number of years leadership experience:_____

4. Number of years in this position:_____

5. Nursing education (check all that apply):

____ ADN	____ MSN
____ Diploma	____ Non-nursing degree (please specify type)
____ BSN	_____

6. Age: _____ 7. Gender: ____ Female ____ Male

8. Employment status: ____ Full time ____ Part time

9. Unit name: _____ Bed size: _____

10. Number of employees supervising: _____

Part II: Formal educational activities

For each item please provide the following:

1. In the left column place a check by items which represent a formal leadership educational activity you have experienced or participated in.

2. In the right column please indicate how important you believe each item you checked was in your development as a leader.

IMPORTANCE KEY:

VI - VERY IMPORTANT
I - IMPORTANT
SI - SOMEWHAT IMPORTANT
LI - LITTLE IMPORTANCE
NI - NO IMPORTANCE

EXAMPLE:

		Importance				
		VI	I	SI	LI	NI
____	Undergraduate courses with leadership content	5	4	3	2	1
__X__	On the job training	5	4	3	2	1

By checking **On the job training** and circling a 4 in the right column while leaving the first item (undergraduate course) blank, you would be indicating the following:

- You had no undergraduate courses in leadership

- You had received on the job training in your development as a leader and you perceive that training to be important

FORMAL EDUCATIONAL ACTIVITIES

IMPORTANCE KEY:

VI - VERY IMPORTANT
I - IMPORTANT
SI - SOMEWHAT IMPORTANT
LI - LITTLE IMPORTANCE
NI - NO IMPORTANCE

	Activity	Importance				
		VI	I	SI	LI	NI
____	Diploma/ADN course with leadership content	5	4	3	2	1
____	A specific diploma/ADN course in nursing leadership	5	4	3	2	1
____	Undergraduate courses with leadership content	5	4	3	2	1
____	A specific undergraduate course in leadership	5	4	3	2	1

FORMAL EDUCATIONAL ACTIVITIES (CONTINUED)

IMPORTANCE KEY:

VI - VERY IMPORTANT
I - IMPORTANT
SI - SOMEWHAT IMPORTANT
LI - LITTLE IMPORTANCE
NI - NO IMPORTANCE

Activity	Importance				
	VI	I	SI	LI	NI
____ Undergraduate nursing courses with leadership content	5	4	3	2	1
____ A specific undergraduate nursing course in nursing leadership	5	4	3	2	1
____ Graduate courses with leadership content	5	4	3	2	1
____ A specific graduate course in leadership	5	4	3	2	1
____ Graduate nursing courses with leadership content	5	4	3	2	1
____ A specific graduate nursing course in nursing leadership	5	4	3	2	1
____ A continuing education program on leadership conducted by employees of your agency	5	4	3	2	1
____ A continuing education program on leadership conducted by employees of previous angencies where you have worked	5	4	3	2	1
____ A continuing education program on leadership conducted by professional organizations	5	4	3	2	1
____ College or university sponsored correspondance courses on leadership	5	4	3	2	1
____ Televised college course on leadership	5	4	3	2	1
____ Televised college undergraduate nursing course on leadership	5	4	3	2	1

FORMAL EDUCATIONAL ACTIVITIES (CONTINUED)

IMPORTANCE KEY:
VI - VERY IMPORTANT
I - IMPORTANT
SI - SOMEWHAT IMPORTANT
LI - LITTLE IMPORTANCE
NI - NO IMPORTANCE

Activity	Importance				
	VI	I	SI	LI	NI
____ Televised college graduate course on leadership	5	4	3	2	1
____ Televised college graduate nursing course on leadership	5	4	3	2	1

PART III: Most important formal educational activities

1. For those items from Part II which represented previous formal leadership educational activities you experienced, please indicate the **FIVE FORMAL** educational activities that you believe contributed the **MOST** to your development as a leader.

Most important formal educational activity: _____

Second most important formal educational activity: _____

Third most important formal educational activity: _____

Fourth most important formal educational activity: _____

Fifth most important formal educational activity: _____

2. For the **FORMAL** educational activity identified as having the **MOST** important contribution to your development as a leader, please list what factors contributed to this activity being the most important to you.

PART IV: Formal Leadership Content

For each item please provide the following:

1. In the left column place a check by items which represent formal leadership content you have received.
2. In the right column please indicate how important you believe each item was in your development as a leader.

IMPORTANCE KEY:
VI - VERY IMPORTANT
I - IMPORTANT
SI - SOMEWHAT IMPORTANT
LI - LITTLE IMPORTANCE
NI - NO IMPORTANCE

Example: CONTENT ITEMS	**IMPORTANCE**				
	VI	**I**	**SI**	**LI**	**NI**
___Organizational philosophy	5	4	3	2	1
___Power and politics	5	4	3	2	1

By checking Power and politics and circling a 4 in the right hand column while leaving the first item blank (organizational philosophy) you would be indicating the following:

- You have not had formal leadership content on Organizational philosophy
- You had received formal leadership content on Power and politics and you perceive this content to have been important in your development as a leader

Please continue with the list below as demonstrated in the example.

FORMAL CONTENT ITEMS

IMPORTANCE KEY:
VI - VERY IMPORTANT
I - IMPORTANT
SI - SOMEWHAT IMPORTANT
LI - LITTLE IMPORTANCE
NI - NO IMPORTANCE

CONTENT ITEMS	**IMPORTANCE**				
	VI	**I**	**SI**	**LI**	**NI**
___Organizational philosophy	5	4	3	2	1
___Power and politics	5	4	3	2	1

FORMAL CONTENT ITEMS (CONTINUED)

IMPORTANCE KEY:

VI - VERY IMPORTANT
I - IMPORTANT
SI - SOMEWHAT IMPORTANT
LI - LITTLE IMPORTANCE
NI - NO IMPORTANCE

CONTENT ITEMS	IMPORTANCE				
	VI	I	SI	LI	NI
___Organizational goals and objectives	5	4	3	2	1
___Organizational policies and procedures	5	4	3	2	1
___Organizational job descriptions	5	4	3	2	1
___Strategic planning	5	4	3	2	1
___Time management	5	4	3	2	1
___Organizational structure	5	4	3	2	1
___Centralized organizations	5	4	3	2	1
___Decentralized organizations	5	4	3	2	1
___Participative management	5	4	3	2	1
___Self-governance	5	4	3	2	1
___Modular nursing system	5	4	3	2	1
___Managed care/case management	5	4	3	2	1
___Product line management	5	4	3	2	1
___Power and politics	5	4	3	2	1
___Conflict management	5	4	3	2	1
___Stress management	5	4	3	2	1
___Collective bargaining	5	4	3	2	1
___Assertiveness techniques	5	4	3	2	1
___Consultation process	5	4	3	2	1
___Quality assurance process	5	4	3	2	1

FORMAL CONTENT ITEMS (CONTINUED)

IMPORTANCE KEY:

VI - VERY IMPORTANT
I - IMPORTANT
SI - SOMEWHAT IMPORTANT
LI - LITTLE IMPORTANCE
NI - NO IMPORTANCE

CONTENT ITEMS	IMPORTANCE				
	VI	I	SI	LI	NI
___Staff development process	5	4	3	2	1
___Employee assessment centers	5	4	3	2	1
___Performance appraisal systems	5	4	3	2	1
___Coaching and counseling	5	4	3	2	1
___Interviewing	5	4	3	2	1
___Termination procedures and process	5	4	3	2	1
___Staffing processes	5	4	3	2	1
___Self-scheduling	5	4	3	2	1
___Job sharing	5	4	3	2	1
___Creative staffing plans	5	4	3	2	1
___Salaried managed nursing units (Professional practice model)	5	4	3	2	1
___Budgeting process	5	4	3	2	1
___Variance analysis	5	4	3	2	1
___Accounting concepts	5	4	3	2	1
___Economic principles	5	4	3	2	1
___Productivity measurement	5	4	3	2	1
___Productivity management	5	4	3	2	1
___Resource allocation	5	4	3	2	1
___Cost-benefit anaylsis	5	4	3	2	1
___Revenue generation	5	4	3	2	1

FORMAL CONTENT ITEMS (CONTINUED)

IMPORTANCE KEY:

VI - VERY IMPORTANT
I - IMPORTANT
SI - SOMEWHAT IMPORTANT
LI - LITTLE IMPORTANCE
NI - NO IMPORTANCE

CONTENT ITEMS	IMPORTANCE				
	VI	I	SI	LI	NI
___Costing out nursing service	5	4	3	2	1
___Retention strategies	5	4	3	2	1
___Recruitment strategies	5	4	3	2	1
___Clinical ladders	5	4	3	2	1
___Marketing strategies	5	4	3	2	1
___Classical organizational theory	5	4	3	2	1
___Hertzberg motivation theory	5	4	3	2	1
___Situational leadership	5	4	3	2	1
___Transformational leadership	5	4	3	2	1
___Systems theory	5	4	3	2	1
___Change theory	5	4	3	2	1
___Problem solving/decision making	5	4	3	2	1
___Communication theory	5	4	3	2	1
___Organizational development	5	4	3	2	1
___Human resource development	5	4	3	2	1
___Role theory	5	4	3	2	1
___Adult learning theory	5	4	3	2	1
___Clinical nurse specialist role	5	4	3	2	1
___Nurse practitioner role	5	4	3	2	1
___Labor relations/EEOC	5	4	3	2	1

FORMAL CONTENT ITEMS (CONTINUED)

IMPORTANCE KEY:

VI - VERY IMPORTANT
I - IMPORTANT
SI - SOMEWHAT IMPORTANT
LI - LITTLE IMPORTANCE
NI - NO IMPORTANCE

CONTENT ITEMS	IMPORTANCE				
	VI	I	SI	LI	NI
___Prospective payment system	5	4	3	2	1
___Mentorship	5	4	3	2	1
___Networking	5	4	3	2	1

PART V: FORMAL TEACHING STRATEGIES

For each item please provide the following:

1. In the left column place a check by items which represent a formal teaching strategy which you have experienced in your development as a leader.
2. In the right column please indicate how **effective** you beleive each item you checked was in your development as a leader.

EFFECTIVENESS KEY:

VE - VERY EFFECTIVE
E - EFFECTIVE
SE - SOMEWHAT EFFECTIVE
LE - LITTLE EFFECTIVENESS
NE - NOT EFFECTIVE

Example: TEACHING STRATEGIES	EFFECTIVENESS				
	VE	E	SE	LE	NE
___Lecture	5	4	3	2	1
___Discussion	5	4	3	2	1

By checking discussion and circling 4 in the right column while leaving the first item blank (lecture) you would be indicating the following:

- You had not experienced Lecture as a formal teaching strategy in your development as a leader
- You had experience Discussion as a formal teaching strategy in your development as a leader and you perceived

that strategy to be effective in your leadership development

Please continue with the list below as demonstrated in the example.

EFFECTIVENESS KEY: VE - VERY EFFECTIVE
E - EFFECTIVE
SE - SOMEWHAT EFFECTIVE
LE - LITTLE EFFECTIVENESS
NE - NOT EFFECTIVE

TEACHING STRATEGIES	EFFECTIVENESS				
	VE	E	SE	LE	NE
___Lecture	5	4	3	2	1
___Discussion	5	4	3	2	1
___Film	5	4	3	2	1
___Video tape	5	4	3	2	1
___Slides	5	4	3	2	1
___Group activities	5	4	3	2	1
___Networking	5	4	3	2	1
___Objectives set by participant	5	4	3	2	1
___Assignments	5	4	3	2	1
___Text readings	5	4	3	2	1
___Journal articles	5	4	3	2	1
___Handouts	5	4	3	2	1
___Guest speakers	5	4	3	2	1
___Peer interaction	5	4	3	2	1
___Teacher/facilitator content expert	5	4	3	2	1
___Teacher/facilitator practice expert	5	4	3	2	1
___Teacher/facilitator teaching expert	5	4	3	2	1

FORMAL TEACHING STRATEGIES (CONTINUED)

EFFECTIVENESS KEY:

VE - VERY EFFECTIVE
E - EFFECTIVE
SE - SOMEWHAT EFFECTIVE
LE - LITTLE EFFECTIVENESS
NE - NOT EFFECTIVE

TEACHING STRATEGIES	EFFECTIVENESS				
	VE	E	SE	LE	NE
___Teacher/facilitator available outside classroom	5	4	3	2	1
___Application emphasis	5	4	3	2	1
___Open classroom environment	5	4	3	2	1
___Interactive teleconference	5	4	3	2	1
___Leadership practicum	5	4	3	2	1
___Internship	5	4	3	2	1
___Participant set goals with scheduled teacher feedback	5	4	3	2	1
___Mutual goal setting by participant and teacher with scheduled teacher feedback	5	4	3	2	1
___Participant set goals with no teacher feedback	5	4	3	2	1
___Mutual goal setting by participant and teacher with no teacher feedback	5	4	3	2	1
___Computer assisted instruction	5	4	3	2	1

PART VI: **Informal educational activities**

For each informal educational activity listed below please provide the following:

1. In the left column place a check by each activity which represents an informal leadership educational experience that you have participated in.

2. In the right column please indicate how important you believe each informal educational activity you checked was in your development as a leader.

INFORMAL EDUCATION IMPORTANCE

IMPORTANCE KEY:
VI - VERY IMPORTANT
I - IMPORTANT
SI - SOMEWHAT IMPORTANT
LI - LITTLE IMPORTANCE
NI - NO IMPORTANCE

INFORMAL EDUCATIONAL ACTIVITY	IMPORTANCE				
	VI	I	SI	LI	NI
____ On the job training	5	4	3	2	1
____ Mentorship	5	4	3	2	1
____ Work committee/task force member	5	4	3	2	1
____ Work committee/task force chair	5	4	3	2	1
____ Informal network within work setting	5	4	3	2	1
____ Formal network within work setting	5	4	3	2	1
____ Informal network outside work setting	5	4	3	2	1
____ Formal network outside work setting	5	4	3	2	1
____ Attendance at professional meetings	5	4	3	2	1
____ Professional organization committee/task force member	5	4	3	2	1
____ Professional organization committee/task force chair	5	4	3	2	1
____ Officer for professional organization	5	4	3	2	1
____ Reading professional journals	5	4	3	2	1

INFORMAL EDUCATION IMPORTANCE (CONTINUED)

IMPORTANCE KEY:
VI - VERY IMPORTANT
I - IMPORTANT
SI - SOMEWHAT IMPORTANT
LI - LITTLE IMPORTANCE
NI - NO IMPORTANCE

INFORMAL EDUCATIONAL ACTIVITY	IMPORTANCE				
	VI	I	SI	LI	NI
____ Reading new texts	5	4	3	2	1
____ Presentor/speaker for work sponsored activity	5	4	3	2	1
____ Presentor/speaker for professional organization activity	5	4	3	2	1
____ Submitted article for publication	5	4	3	2	1
____ Article accepted for publication	5	4	3	2	1
____ Served as research assistant	5	4	3	2	1
____ Designed and implemented research project	5	4	3	2	1
____ Special project assignment in addition to current job expectation in work setting	5	4	3	2	1
____ Special project assignment with release from current job expectation in work setting	5	4	3	2	1
____ Planned and implemented unit level change	5	4	3	2	1
____ Previous supervisor(s) providing a positive leadership role model	5	4	3	2	1
____ Current supervisor(s) providing a positive leadership role model	5	4	3	2	1

PART VII: Most important informal educational activities

1. For those items from Part VI which represented previous **INFORMAL** leadership educational activities you experienced, please indicate the **FIVE INFORMAL** educational activities that you believe contributed the **MOST** to your development as a leader.

   Most important informal educational activity: _____

   Second most important informal educational activity: _____

   Third most important informal educational activity: _____

   Fourth most important informal educational activity: _____

   Fifth most important informal educational activity: _____

2. For the **MOST IMPORTANT INFORMAL** educational activity please list what factors contributed to this activity being most important in your development as a leader.

PART VIII: Satisfaction and effectiveness measures

1. Please describe how satisfied you are as hospital nurse leader.

2. Please list the specific factors you use to gauge or measure your effectiveness as a hospital nurse leader.

PART IX: Ten most important educational activities

In Part III and VII you identified the five **formal** and **informal** educational activities you believe have contributed most to your development as a leader. Please carefully consider the importance of these ten activities (the five formal and five informal activites) in your development as a leader. Now, **ignoring** the formal or informal classification of these ten educational activities, please list them in **rank order** of total importance to you in your development as a leader.

Most important educational activity: _____

Second most important educational activity: _____

Third most important educational activity: _____

Fourth most important educational activity: _____

Fifth most important educational activity: _____

Sixth most important educational activity: _____

Seventh most important educational activity: _____

Eighth most important educational activity: _____

Ninth most important educational activity: _____

Tenth most important educational activity: _____

(AGAIN, THANK YOU FOR YOUR TIME AND EFFORT IN COMPLETING THIS QUESTIONNAIRE)

APPENDIX 3

INTERVIEW GUIDE

Interview Guide

1. On your questionnaire you identified _____ as the five most important educational activities in your development as a leader. Describe for me your experience regarding participation in _____(educational activities).

2. In deciding on the importance of these activities, what factors influenced your decision? Please elaborate about these factors?

3. While participating in these educational activities, describe some of your reactions and your feelings about the experience.

   Describe your reactions and feelings regarding the content.

   Describe your reactions and feelings regarding the design (how the activity was taught or conducted).

4. Please identify and describe any specific content that was particularly helpful or useful. What about the content made it useful and helpful?

5. Please identify and describe any specific teaching design that was particularly helpful or useful. What about this design made it useful and helpful?

6. Please describe a typical participant - classmate - peer who participated in these activities at the same time as you. How was this person like you? Different from you?

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